DOCUMENT RESUME

ED 371 735 IR 016 787

AUTHOR Hunter, Connie
TITLE Application of Information Skills through the Use of Integrated Curriculum.
PUB DATE Apr 94
NOTE 132p.; Master's of Arts Action Research Project, Saint Xavier University.
PUB TYPE Dissertations/Theses - Masters Theses (042) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS *Course Integrated Library Instruction; Flexible Scheduling; Information Seeking; *Information Skills; *Integrated Curriculum; Intermediate Grades; Learning Resources Centers; *Librarian Teacher Cooperation; *Library Skills; Media Specialists; Questionnaires; School Libraries

ABSTRACT

This report describes a program for applying information skills through the use of integrated curriculum with intermediate students in a middle-class, suburban community located outside of Chicago. The problem was observed by the library media specialist who found that students did not transfer and apply information skills learned in an isolated situation to their classroom assignments. Analysis of the probable cause data obtained via surveys of teachers and students revealed that most students visited the library media center infrequently and rarely other than the regular weekly scheduled time. The facilities were not often used by teachers or students in connection with their regular classroom assignments. Two categories of intervention were employed. The first was implementation of altered access to and use of the library media center through flexible scheduling. The second involved collaboration of the library media specialist and classroom teacher in integrating information skills into the classroom curriculum. Students involved in this intervention were able to apply information skills to classroom assignments through the use of integrated curriculum facilitated by a flexible schedule in the library media center. Survey instruments used in the study are included in the appendix. (Author/JLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

IP

ED 371 735

APPLICATION OF INFORMATION SKILLS THROUGH THE USE OF INTEGRATED CURRICULUM

by

*Connie Hunter

Submitted in partial fulfillment of the requirements for the degree of Master's of Arts in Teaching and Leadership

Saint Xavier University-IRI
Field-Based Master's Program

Action Research
Site: Wheeling, IL
Submitted: April, 1994

*Library Media Specialist
Whitman Elementary School
Wheeling, IL

IR016787

BEST COPY AVAILABLE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Lloyd A. Leake
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

This Action Research was approved by

Priscilla Hastwig Ed. D., **SXU Facilitator**

Terry Stirling, Ph. D., **IRI/Skylight Facilitator**

Dean, School of Education

Table of Contents

page

Abstract.....iv

Chapter

I Problem Statement and Community Background.....1

General Statement of Problem.....1

Immediate Problem Context.....1

The Surrounding Community.....4

Regional and National Context of Problem.....5

II Problem Definition and Evidence.....8

Problem Background.....8

Problem Evidence.....9

Probable Cause of Problem.....17

III The Solution Strategy.....24

Review of the Literature.....24

Project Outcomes.....41

Project Solution Components.....42

IV Action Plan for Implementing the Solution Strategy.....43

Description of Problem Resolution Activities.....43

Methods of Assessment.....49

V Evaluation of Results and Processes....50

Implementation History....50

Presentation and Analysis of Project Results....61

Reflections and Conclusions....75

VI Decisions On The Future....77

The Solution Strategy....77

Additional Applications....78

Dissemination of Data and Recommendations....80

References Cited....82

Appendices....88

Appendix A Teacher Survey and Results....88

Appendix B Student Survey and Results....94

Appendix C Teacher Interview Questions....98

Appendix D Student Interview Questions....99

Appendix E District Learning Team Proposal....100

Appendix F Story Board....107

Appendix G LMC Role in DLT/ Options to Board....108

Appendix H Fourth Grade Integrated Units....111

Appendix I Schedule....115

Appendix J Memo, L.M.C. Lines....116

Appendix K Monthly Unit Schedule....118

Appendix L Suggestions for Purchase.....119

Appendix M April Teacher Interviews.....120

Appendix N April Student Interviews.....121

Appendix O Assessment Automated Catalog.....122

Appendix P Information Skills Checklist.....123

Abstract

AUTHOR: Connie Hunter SITE: Wheeling
DATE: April, 1994.

TITLE: Application of Information Skills through the use of Integrated Curriculum.

ABSTRACT: This report describes a program for applying information skills through the use of integrated curriculum with intermediate students in a middle class suburban community located outside Chicago, Illinois. The problem was observed by the library media specialist who found that students did not transfer and apply information skills learned in an isolated situation to their classroom assignments.

Analysis of the probable cause data revealed that most students visited the library media center infrequently and rarely other than the regular weekly scheduled time. The facilities were not often used by teachers or students in connection with their regular classroom assignments. Therefore transfer of knowledge learned in information skills classes to daily classroom work was not made.

Solution strategies suggested by well-known educators and librarians combined with an analysis of the problem setting resulted in two categories of intervention. The first was implementation of altered access to and use of the library media center through flexible scheduling. The second strategy involved collaboration of the library media specialist and classroom teacher in integrating information skills into the classroom curriculum. The interventions would allow students greater access to the resources of the library media center and would provide connections between classroom work and information skills.

Intermediate students involved in this intervention were able to apply information skills to classroom assignments through integrated curriculum facilitated by a flexible schedule in the library media center.

Chapter 1

STATEMENT OF PROBLEM AND DESCRIPTION OF CONTEXT

Problem Statement

The intermediate students at Walt Whitman Elementary School exhibit an inability to transfer and apply information skills taught outside of grade level curriculum to classroom assignments, as measured by library media specialist observation and classroom teacher survey.

Description of Immediate Problem Setting

The new Walt Whitman Elementary School building was dedicated in the fall of 1992. It is a beautiful facility and one that the staff and community worked hard to acquire. The first referendum lost by a narrow margin and the second passed with a wide majority. For over a year the staff and students watched the new building spring up on what was once a baseball field. A special farewell was given by students, teachers, and community before the old building was torn down during the summer. At the present time Whitman consists of 601 kindergarten through sixth grade students, down from 630 at the beginning of the year. The ethnic

composition of the student body is as follows: 55 percent White, 35 percent Hispanic, six percent Black and four percent Asian or Pacific Islander. The 1992 State Report Card noted that 16.9 percent of the students were classified low income and five point six percent of the students had limited English proficiency. The numbers were considerably higher in 1993-4 as five intermediate bilingual classes were added. This brings the number to 114 students or 18 percent who have a limited English proficiency. According to office records, 33 percent of the students are low income and receive free or reduced-priced lunch. In the Enrichment Opportunities Program (EOP) and the Primary Enrichment Program (PEP) there are a total of 36 students, or nearly six percent of the student body. Those students in the Learning Disabilities (LD) and Behavior Disordered (BD) classes also constitute nearly six percent of the population. Students in the special Chapter I reading program number 48, or eight percent of the student population.

Heading the 47 staff members at Whitman is one male principal, assisted by a full time secretary. There are 27 grade level teachers; 25 full-time and two part-time. Of the 25 full time teachers five are intermediate bilingual teachers. Other teachers include one library media specialist, one art teacher, one music teacher, one computer-writing teacher, and one full-time and one part-time physical education teacher. The support staff includes two L.D. /B. D. teachers, one speech therapist,

one Chapter I reading specialist, one social worker, one part-time school nurse, and one part-time psychologist. There are three aids/assistants in the building. They include one health assistant, one library media assistant, and one part-time LD/BD aid. The two band and orchestra teachers are in the building on a part time basis for lessons. The maintenance staff consists of one day custodian and two night custodians. The school personnel is 100 percent white and 90 percent female.

The average number of students per class by grades:

kindergarten.....18.3	bilingual fourth grade.....30
first grade.....24.5	fifth grade.....24
second grade 24.3	bilingual fifth grade.....24
third grade 20.3	sixth grade.....22
fourth grade.....22	bilingual sixth grade.....26

The class sizes for the intermediate grades increase during certain subjects due to the mainstreaming of bilingual students. To satisfy state requirements all physical education, art, music, and computer-writing classes for bilingual students are divided so that one-half of the class is from a bilingual class and one-half is from a regular class. For one semester students also go to a Science Discovery Center once every two weeks for two and one-half hours of hands on science. Bilingual students also attend if they are main-streamed.

Description of Surrounding Community

Walt Whitman Elementary School is one of 11 schools in Community Consolidated School District 21. The district is located in Wheeling, Illinois, a northwest suburb in Cook County, outside of Chicago. Nine elementary schools feed into two junior highs which in turn feed into three high schools. The total enrollment for the district, according to the 1992 State Report Card, was 6,146 , of which 75.4 percent are White, 14.7 percent are Hispanic, seven point three percent are Asian/Pacific islander, two point four percent are Black, and two tenths of a percent are Native American.

According to The Sourcebook of Zip Code Demographics the population of Wheeling in 1990 was 31,816. This is a 37 percent increase over the 1980 census population of 23,266. In 1990, 90.4 percent of the population was White, one point seven percent Black, two tenths percent Native American, four point three percent Asian/Pacific Islander and three point five percent listed as other. Of the White population nine percent were of Hispanic origin. Married couples comprised 83.9 percent of family households and single parent households were 16.1 percent. Of the family households 46.2 percent included children and the average size of the family household is 2.91. The socioeconomic status of the village indicates the median family income to be $45,502 and the per capita income $18,648. The median home price is $123,750 and the median rent

is $599. Wheeling has many industrial parks and is the national headquarters of many large companies each employing over 450 workers. These companies include Ekco, Orval Kent Food Company, Wickes Furniture, and Kenny Construction. Along with the village of Prospect Heights, Wheeling is co-owner of a small airport called Palwaukee. Recent commercial developments include Wal-Mart, Sam's Club, and several small strip malls. In 1992, voters approved a new water park and an adjacent park district facility.

Regional and National Context of the Problem

Barron and Bergen, (1992, p.523), in their article on the American Library Association's Information Power: Guidelines for School Library Media Programs, state "The school library media specialist should be a master teacher, able to work with the classroom teachers to integrate information management skills into their curriculum and classes." Along with being a master teacher the library media specialist also must fill all the other roles of the position. The collection, both book and media, must be kept current and within budget. Audio visual equipment and computer hardware must be maintained. Assistance must be provided to students and staff with new technologies, such as CD ROM and telecommunications. These responsibilities are grouped under the three roles: information

specialist, teacher, and instructional consultant. Barron and Bergen (1992, p.524) believe:

> The most important and critical role that the modern school library media specialist has to play is that of partner to the other members of the instructional team. In this partnership the school library media specialist combines all the functions just mentioned in order to help teachers integrate the use of information resources into classroom presentations, assignments, and reinforcement activities.

Montgomery (1992, p.530) states that in less successful library media programs "the library media specialist may be expected to develop lesson plans that become the basis for a distinct subject, library skills, even though studies show that students learn research and study skills most effectively when they are integrated with classroom instruction." Barron and Bergen (1992, p.524) adhere to that statement:

> In the past the focus was on teaching students what information could be retrieved from which books and resources-for example, what types of information could be found in a world almanac and how to use the index and read the tables. Such knowledge remains important, but when it is taught in isolation the student is not able to transfer that learning to other situations. If a skill is taught instead in the context of a subject area, such as science or social studies, transfer is more likely because the skill has been reinforced in a relevant activity.

For thirty years now school libraries have existed at the edge of the instructional life of the school. Libraries provide information and

materials to back up instruction, but those in charge have not taken an active role in the design and implementation of the curriculum. Research has found that library media specialists rate very well when teachers compared them with other teachers in levels of cooperation in instruction. It is also to be noted that classroom teachers are not as supportive as administrators of an instructional role for the school library media specialist. (Bell and Totten, 1991).

Chapter 2

PROBLEM EVIDENCE AND PROBABLE CAUSE

Problem Background

As stated in Chapter 1, the inability of intermediate students to transfer and apply information skills taught outside their grade level curriculum to classroom assignments has been a problem at Whitman School. This has also been a problem at other schools in the district and, at the beginning of the 1991-1992 school year, a special district Library Media Center Curriculum Committee was formed to review the matter. The eleven library media specialists (LMS) discussed their current role in the library media center (LMC) and the functions they performed for the school and students. For many years library skills has been taught for one-half hour a week as a separate subject, in isolation, and not within the context of classroom curriculum. This one-half hour provided classroom teachers with planning time. It was also the only time most students came to the library to check out books. Evidently, this was not an ideal use of the library where so much information was available, but not accessible. Over time many of the library media specialists started working with classroom teachers to coordinate the classroom

curriculum with what was now to be called "information skills". It was a welcome change and helped move away from the isolation of the former library skills lessons. Skills were now taught at some schools when the need was observed and not in a specific sequence set down in advance. Skills were often reinforced because they were used again and again within the classroom curriculum. One school proposed the need for extra personnel to allow the library media specialist more time to consult with teachers on planning integrated units. This plan resulted in a full time teaching assistant. At another school the library media specialist initiated two days of flexible access time with fifth and sixth grade students and with classes greater than one-half hour in length. The program expanded this year to include the fourth grade.

The district has allowed the curriculum committee to enter its third year and has shown support in the library media specialists' efforts to put their goals into action. After having observed the initiative and enthusiasm of other library media specialists, the current use of the Whitman Library Media Center, and the lack of transfer of information skills by students to assignments, it was time for some action to be taken at Whitman School.

Problem Evidence

The problem of transfer of information skills to classroom research assignments has been observed by the library media specialist for quite some time. Students do well on skills during class time and on their criterion referenced tests, however when they come at a later time to look something up for class they do not use the card or automated catalog, but instead ask the library media specialist or the assistant for help. Many students use only the encyclopedia for information and never check the rest of the collection. Often times the special reference books are left on the shelf, as are the magazines. More often than not only one source is consulted and the students cannot evaluate this source because they have nothing with which to compare it.

The teachers send students to the LMC for information that the students do not know how to access and only give them five minutes time. Indexes are too much bother because they inevitably take time. Students are often spoon fed the information by the library media specialist or assistant because it is quicker and there is no time to teach the skill. Hopefully the student is processing the search and can apply the information on the next visit. Many teachers have classroom collections of materials they have purchased or checked out from public libraries and never send the students to the library media center to do their own research. With so much curriculum to cover, a majority of teachers feel

their students will miss something if they leave the room to go to the library to search for information. For these reasons the LMS has found that Whitman intermediate students do not see the connections of what they learn in information skills classes to the subjects studied in class.

Surveys were given to all first through sixth grade teachers at Whitman School. (Appendix A) From these surveys it is evident that teachers do not access the library media center to its potential and instead use resources in their rooms. On the survey, questions one through six examine how teachers use the LMC with their students. Table 1 shows the responses by percents. Seventy-four percent of teachers responding sometimes send individual students to use the LMC, zero percent frequently and 26 percent never send individual students.

Table 1

Frequency of Use of the Library Media Center by Classroom Teachers in Percent

Question	Frequently	Sometimes	Never
1	0%	74%	26%
2	13%	52%	35%
3	0%	39%	61%
4	13%	26%	61%
5	4%	22%	74%
6	9%	35%	56%

1. Teachers send individual students at any time
2. Teachers send small groups at any time
3. Teachers schedule small groups in advance
4. Teachers schedule special instruction
5. Teachers schedule extra book checkout times
6. Teacher/grade level schedules for special use

BEST COPY AVAILABLE

For unscheduled small groups the percentage is better, 13 percent frequently send groups to the LMC, 52 percent sometimes, and 35 percent never. If the teacher plans in advance to send groups to the LMC the percentages are less. The responses were zero percent for frequently, 39 percent for sometimes and 61 percent for never. Last year, because of a concerted effort by the library media specialist to provide extra time, more classes came to the LMC for special integrated instruction. This was reflected by 13 percent of teachers responding frequently to question four, 26 percent sometimes, and 61 percent never. The never response would have been much higher since most days are scheduled with half-hour classes, and there is very little time to be flexible. This is also a reason that 74 percent of teachers responded that they do not schedule extra book checkout times and that 57 percent do not schedule the LMC for special use.

Figure 1 illustrates this data even more clearly.

Response by percent

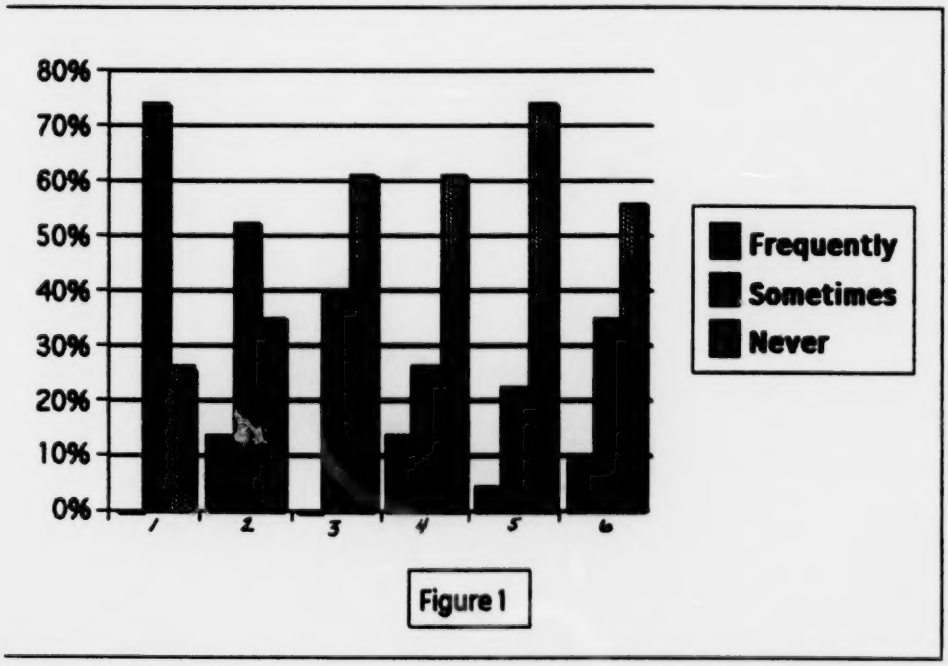

Figure 1

1. Teachers send individual students at any time
2. Teachers send small groups at any time
3. Teachers schedule small groups in advance
4. Teachers schedule special instruction
5. Teachers schedule extra book checkout time
6. Teacher/grade level schedules for special use

Question eight on the survey refers to how often the teacher checks material out for classroom use. Sixty-one percent responded frequently and 39 percent circled sometimes. However, teachers feel they do not have enough resources in their classrooms to support the curriculum. Question 11 had the following responses: 13 percent of teachers frequently have enough material on hand, 52 percent sometimes, and 30 percent never had enough resources. When asked in question nine if they informed the LMS of their units so that materials could be available, seven teachers did so frequently, 13 sometimes and two never. Question seven asked if the teachers consulted with the LMS for instructional planning. To this question two teachers responded they did so frequently, 17 did so sometimes, and four never did. A majority of teachers thought the communication with the LMS was excellent or good with only three teachers responding that it was O.K. and one that it needed improvement. When surveyed about seeing students in grades three through six using information skills in their classroom assignments, six responded they observed this frequently, nine said sometimes, one said never, five had no opinion and two did not respond.

When questioned about the importance of a scheduled half hour planning time during Library Media center classes, 14 teachers thought it was very important, six thought it was somewhat important, and only two

thought it was not very important. At the end of the survey was the question "If access to the Library Media Center were not an issue how do you think you would use those facilities and resources in your teaching?" Many teachers responded that they would bring their classes down for research more often and allow the students freer access to the LMC. To quote one teacher,

> I would like to use the LMC much more. I would bring down my entire class for classroom instruction and then have the class do research. I would also like to send down a different small group every day for a week to do research. I won't give up my scheduled break, however, we have worked too hard for it.

In a more basic survey (Appendix B) done with 50 sixth grade students 70 percent of the students replied they only came to the LMC once a week, which would be during their regularly scheduled class time. Only 50 percent of the students ever asked their teacher if they could use the LMC at another time. Fifty percent did answer that their teacher sent them to the LMC in a small group to do research, although the number of times sent was not a question included in the survey. When asked if they would like to do class research in the LMC, 94 percent of the students responded with a yes. Ninety percent noted that their teachers had extra information in the classroom on the units they were studying. The students felt they knew many of the necessary information skills. One hundred percent responded they could find a book by themselves using the card catalog, but 60 percent noted they would ask the librarian for help

because it was quicker. After only one year, seventy-two percent could do a search on the automated catalog without help. On the other side only 34 percent have checked out references overnight and only 38 percent have used the CD-ROM in the LMC. When questioned if they would read more if they could check out books at any time 66 percent of the students replied they would.

Along with the survey, interviews were conducted with both teachers (Appendix C) and students (Appendix D). During the teacher interviews it was mentioned that students use many information skills that are taught both in the classroom and in the LMC such as using the index and glossary. Many more skills, such as those related to technology, are not observed because the teachers lack specific resources in their rooms. Teachers do not see the students using the card catalog, CD-ROM, or a magazine index because the teachers do not stay with their classes in the LMC. There were many skills students lacked that the teachers felt were needed for specific classroom units. Many teachers use the research process in their classroom and most rely on their own resources or get book bags from the public library. If the LMC were more accessible with both time and staff, they might send small groups for research on a regular basis. The teachers felt their students were learning information skills in the LMC, but that they were not retaining the information because they were not applying what they learned, or had difficulty retaining it

from week to week. It was also felt that not many of the students visited the public library to do research, but some did visit to check out books for pleasure reading. Students interviewed liked doing research, did research in the classroom using the teacher's resources, and liked to do research in the LMC because it had more information and different types of resources. They saw the need to learn information skills and even felt these skills would be important to know in the years to come.

Probable Causes of Problem

Data to indicate probable cause factors was also gathered from the surveys and interviews and additional data was obtained from the literature. Whitman students only come to the LMC at scheduled half-hour times once a week. According to Buchanan (1991, p. xi),

> In the midst of the present day information explosion, a student having just one "turn" to use the library media resources on Tuesday at 10:00 a.m. is not enough. Students must have access to information at all times, be able to think critically, integrate ideas from several sources, and use all those ideas to solve often complex problems or questions.

At Whitman teachers rarely send individuals or small groups of students to the LMC when they need to do research. Since the LMC is scheduled most of the week with half-hour information skills classes, and with Enrichment Opportunity Program (EOP) and Primary Enrichment Opportunity (PEP) sessions, it is perceived there would not be

adequate supervision or sufficient help for the students. When students do come to the LMC for research, they are only given a few minutes by their teacher and need the information immediately. There is no time for a sufficient search and so the information is spoon-fed, or handed to the student after the LMS or assistant finds the information. Often times there is another class in the LMC receiving instruction and time is taken from them to get the information for the drop-in student. If the student had sufficient time to do the research or arrangements were made in advance, the student would find success in an independent search. This and the lack of any independent research leads to a student not valuing the ability to access information and expecting to be spoon-fed by both the classroom teacher and the LMC staff.

Each class in the school has one-half hour a week of LMC time in which the LMS has to teach specific grade level information skills. During this same half hour the students also need to choose one to three books for their reading enjoyment or to find books corresponding to what they are studying in class. This actually means fifteen minutes or less of information skill instruction. Can this be enough time to teach the skills needed to understand new technology such as the automated catalog, CD-ROM, and telecommunication? How many classroom teachers would consider this to be sufficient?

Information skills are frequently forgotten since they are not

taught within the context of the grade level curriculum and the students do not see any connections with what they learn in the LMC and what they study in the classroom. According to Walker and Montgomery (1992, p.vii),

> It is well accepted that library media skills ought to be taught in connection with classroom subjects...and skills to be valuable must be applied to subject matter... Library media skills taught without reference to classroom subjects are nothing more than library science.

Eisenberg and Berkowitz (1990) believe "Library and information skills are most effectively learned when integrated with the needs and activities of the classroom." McGovern (1991, p.128) concurs "Skills taught in isolation have very little meaning for students and thus no long term learning takes place. When skills are taught in relation to need within a meaningful context, students are motivated to learn." Fox and Allen (cited in Buchanan, 1991, p.13),

> support the notion that to develop into independent media users, students need opportunities to use the facilities and resources in purposeful ways. As with other learning, the learning of library skills in isolation is meaningless.

At Whitman the present information skills curriculum is still the curriculum formerly called library skills. There is a scope and sequence chart and skills are taught from third grade to sixth grade building on what has been previously taught. If fifth graders need information for a

unit easily found in the almanac, they would not consult it since they don't study the almanac as a reference book until sixth grade. The same goes for the Children's Magazine Guide, an index tool for magazines which is not in the curriculum until the sixth grade. The students in all grades should be able to use these resources when ever they are needed and not have to wait for the curriculum. The LMS would need to know when it would be convenient and appropriate to teach these skills and at a time when they would have the greatest impact on the grade level curriculum. Currently efforts are being made to become more familiar with what is taught at each grade level and at what time of the year each subject is taught. Walker and Montgomery (1992) refer to the fact that professionals understand the need for classroom integration only they are overburdened by structural scheduling and little available time to plan with teachers. This lack of planning time and communication between the classroom teacher and the library media specialist is also evident when materials that have been ordered to support specific curriculum are not checked out by the teacher. Time is needed for the LMS to communicate and let the teachers know what is available in the LMC to support their curriculum. Classroom teachers also need to take the initiative and come to the LMC to search for materials that support their program, as well as to plan together with the LMS on ways for the students to use the facilities, not just the collection. Because of a lack of time, teachers have not been

inserviced on the new technology. If they do not have firsthand knowledge of how the CD-ROM or automated catalog work, survey data indicate they most likely would not send their students to the LMC to use this technology.

Some teachers do not want to team teach or to collaborate with the LMS and would rather remain in a self-contained classroom and use their own resources or a book bag from the public library. Sarason (cited in Brown, 1990, p.35) states that "most teaching occurs behind closed doors in a self-contained classroom, and that is the way most teachers want it. In fact, some teachers said they could not work with another adult in the room." As for teachers working with the LMS on planning integrated units, Jackson (cited in Brown,1990, p.36) states that "requiring teachers to plan in advance was perceived as a threat to the teachers autonomy" in their classroom. There is a significant need felt by the teachers at Whitman to be able to keep their half hour planning time which is provided when their students are in the LMC. The dual problems of planning time and teacher/librarian collaboration is recognized by Loertscher (1988, p.60) when he states, "that resource-based teaching requires planning time 'a commodity' in short supply in most schools. In many elementary schools, the LMC is used as a babysitting facility while teachers have a planning period. Such a practice prevents teacher/LMS interaction and is counter productive." However,

classroom teachers need planning time from other disciplines to plan with the LMC for integrated studies. Other planning times are also provided by music, physical education, art, computer writing and the Discovery Center (hands on science center). Teachers felt they worked hard to get their LMC planning time and would not give it up, even for something which would help or benefit their students, fearing a precedent might be set and they could lose other times, too.

A summary of the probable causes gathered from observations, surveys, interviews and literature include the following:

1. Students only come to the LMC at scheduled one-half hour times.

2. The LMS is not available to help individuals or small groups of students because of scheduled library skill and enrichment classes.

3. Teachers do not send students to the LMC because of a perceived lack of supervision.

4. Students need information immediately and have no time for proper searches.

5. Students do not value accessing their own information: They want to be spoon-fed.

6. One-half hour a week is not enough time to teach information skills and also have book checkout.

7. There is not enough time to instruct students about the new technology.

8. Information skills are not retained because they are not applied in context.

9. Information skills curriculum as set for grades three to six is not appropriate. Many of the skills are needed before they are taught in the formal program.

10. The LMS does not know the curriculum as taught in the classroom because of recent changes.

11. There is not enough communication between the LMS and the classroom teachers.

12. Teachers often do not know all the materials that are available in the LMC.

13. Many teachers do not exercise their opportunity to request resources in the LMC.

14. There is a lack of inservice for teachers on new technology, therefore they do not see the need for student use of this technology.

15. Some teachers feel secure teaching in an isolated classroom, and are apprehensive about team-teaching.

16. Teachers are not willing to give up their weekly one-half hour planning time during LMC time.

Chapter 3

THE SOLUTION STRATEGY

Review of the Literature

The probable cause data suggests a lack of opportunity for students and teachers to access the facilities of the Library Media Center. It also implies that because the students are in the LMC so infrequently they do not have a chance to practice the skills they have learned in their one-half hour sessions once a week. The probable cause data shows most teachers are unwilling to give up their one-half hour planning period each week at a specified time. It also shows that students are not sent to the LMC to do research because teachers take the resources to their classrooms since the LMC is scheduled with "library " classes. Other probable cause data shows that students check books out only during their once a week class time and are dependent, not independent users of the LMC. Transfer of skills to real life situations does not occur because very few of the students visit the school and public library. Most important of all the probable cause data shows that the students are not taught information skills within the context of the curriculum therefore, they see no connection between what they learn in the LMC and what they learn

in the classroom. For this transfer to occur there must be time for teachers and the library media specialist to plan and collaborate.

The literature search showed a need for increased access to the facilities and a change in the quality and quantity of teacher/library media specialist collaboration. According to Barron and Bergen (1992), when the library is used as a planning time for teachers, this rigid scheduling prevents use of both the facility and the LMS to anyone but the class that is slated. They further state that while art, music and physical education are discipline areas, "the school library media program is a resource and service agency and the school library media specialist is a resource and service person" (p. 524). One cannot be a resource and service person with a rigid schedule. A flexible schedule would allow for open access to the facilities and to the library media specialist. Another popular term for rigid scheduling is fixed scheduling. What exactly do the terms fixed and flexible (open) mean when applied to a library media center?

Two types of scheduling occur in elementary library media centers. These are fixed and flexible. A fixed schedule means that each homeroom class will visit the library media center for instruction and book check out once a week, usually allowing their teacher a planning period. A flexible schedule allows for classes to meet in a variable pattern dependent on their instructional needs. The LMS may teach students

a sequence of lessons daily for a given number of days and then not meet with them again until they require more instruction. Most of the literature agrees that there are two advantages of flexible scheduling. The first is the involvement of the LMS and the library media program with the classroom teacher and the grade level curriculum. The second is the integration of information skills into meaningful tasks related to classroom expectations and student outcomes (Donham van Deusen, 1993). Most, if not all of the literature emphasizes the importance of flexible scheduling in connection with integrated curriculum and library media specialist/teacher cooperation. Haycock (1990) stresses that the importance of flexible scheduling of facilities and service is obvious if integration is to occur. "Furthermore, it is downright foolish for the school's teacher-librarian to provide planning/preparation time for teachers if the first priority of the teacher-librarian is to be available to plan with that teacher" (P.32) (teacher-librarian is another term for library media specialist and is used in Canada). Haycock (1990) goes on to state that there are districts where the teacher-librarian's role is spelled out and where flexible scheduling is mandated. McDonald (1988) finds that planning and designing instructional activities with teachers necessitates a flexible schedule in the media center. Donham van Deusen (1993, p.175) in her research states "Programs employing flexible scheduling were found to have significantly more occurrences of

library media specialist involvement in evaluation of instructional units than programs employing fixed schedules" and "the library media specialist most likely to be involved in curriculum had a flexible schedule in which team planning occurred" (Donham van Deusen,1993, p.175). In a report which examined the status of library media services of Department of Education exemplary schools, Loertscher, Ho and Bowie (1988) found,

> The meshing of instruction with library media materials occurs where flexible schedules allow for day long access by individuals, small groups, and large groups to the center. In schools where library media specialists are locked into heavy scheduled days or do not have adequate staff, flexibility and more staffing to make it work are major dreams (p.79).

In their recommendations Loertscher, Ho, and Bowie (1988) state:

> It is possible to blunt the impact of the library media center if massive rigid scheduling and time-consuming 'courses of library skills' are taught. As one person recently noted, ' the children in my school are forced to spend more time learning library skills than I spent getting a master's degree in library science!' (p.80).

Their study showed that there was a definite relationship, between excellent schools and excellent library media programs. Also, for library media programs to have impact on elementary education the best advice was to have a full-time staff, provide a flexible schedule, and have a program which included, among other priorities, a partnership with

teachers on instructional development. Information skills could have supporting role and individual assistance to learners who are using materials would be stressed (1988).

The Illinois School Library Association Position Statement on Flexible Scheduling (1992, p.B8) reads:

> The integrated library media program philosophy requires that an open schedule must be maintained. Classes cannot be scheduled in the library media center to provide teacher release or preparation time. Students and teachers must be able to come to the center throughout the day to use information sources, to read for pleasure, and to meet and work with other students and teachers.

The U.S. Department of Education, in What Works (1988), states that in schools with flexible scheduling the students believe that the LMC is more useful in their school work. Other comments include "Flexibly scheduled resource centers provide greater academic benefits, and the use of the LMC to provide preparation time for the classroom teacher negates the possibility of a successful school program" (1988, p.24).

Flexible scheduling can bring many benefits to a library media center. According to the Educational Media Association of New Jersey in Creative Scheduling: Excellence in the Media Center (Browne & Burton, 1989 p.21) the benefits of flexible scheduling include:

1. Integration of library skills instruction with what is taught in the classroom.

2. There can be the spontaneity of the teachable moment.

3. Enhancement of instructional units planned and sometimes taught by both teacher and library media specialists.

4. Utilization of the media center by more individuals and small groups. Practice in searching for information using reading, study, critical thinking and location skills.

5. Participation in activities such as author visits, book fairs, and contests designed to increase enjoyment of literature and promotion of reading.

6. Opportunities to learn about other resources and new technologies beyond the media center.

7. Guidance in book selection by the library media specialist who knows both book and student.

8. Repetition of successful experience giving students confidence to become life-long library users.

All these factors are excellent benefits of a flexibly scheduled library media center, but many of these benefits might also be realized with a fixed schedule. For a more detailed look at the differences between a fixed schedule media program and a flexible schedule media program, consult Figure 2 . This chart prepared by the Dade County Public Schools in 1988, compares each area in both types of library media programs (cited in Buchanan, 1991, p.6)

Fixed Schedule	Flexible Schedule
1. The use of the library media center is determined by administrative scheduling.	1. The use of the library media center is determined by teacher/student needs and interests.
2. The library media center is used for one class at a time like other classrooms in the building.	2. The library media center is used as a public facility to accommodate students of different age levels and grades simultaneously.
3. The library media center is rarely used during unscheduled periods.	3. The library media center is used all day by students involved in a variety of independent or group activities.
4. There is little correlation between classroom activities and library media center utilization.	4. Library media center visits are related to classroom activities.
5. The library media center is available for classes only.	5. The library media center is available for classes, small groups and individuals.
6. Information skills are taught in isolation.	6. Information skills lessons are determined by curriculum need.
7. Information skills are rarely reinforced in the classroom; therefore they are quickly forgotten.	7. Information skills lessons include immediate hands-on experience and reinforcement through classroom assignments.
8. Information skills instruction is confined to approximately 12 minutes per week.	8. Information skills instruction is scheduled for blocks of time determined by need.
9. There are minimal reference assignments therefore reference books are basically unused.	9. The library media center is used for reference assignments and for reference games.
10. Students have poor information retrieval skills.	10. Students learn to locate materials through frequent practice.
11. Students check out books only on assigned days.	11. Students check out books any day of the week.
12. The majority of books circulated tend to be fiction. Nonfiction circulation is minimal.	12. Students are more likely to use both fiction and nonfiction learning resources.
13. Listening, viewing, browsing, exploration and use of periodicals minimized by time constraints.	13. Students have unrestricted opportunities to use audio-visual materials, browse, explore, and use all collections.

BEST COPY AVAILABLE

14. Students tend to be dependent rather than independent users.	14. Students tend to use the facility independently.
15. When students reach junior high, they seldom use the library media center for recreation reading, listening and viewing purposes.	15. When students reach junior high they are more likely to use the library media center for recreational reading, listening and viewing purposes.
16. The library media specialist spends the day planning and teaching.	16. The library media specialist has flexible time to promote school-wide information, reading and media motivation programs.
17. Teachers tend to view the library media center as a peripheral subject area unrelated to their own instructional assignment.	17. Teachers tend to view the library media center as an extension of their own classroom.

Note. From "Elementary School Library Media Centers Access Patterns" by Dade County Public Schools, 1988, Florida Media Quarterly, 11.

Figure 2

Elementary School Library Media Center Access Patterns.

This comparison points out many valid reasons to have a flexible schedule in a school library media center. What does the literature have to say about library media specialists who have switched from fixed to flexible? Lois Holanson Kroeker was a LMS in a West Texas school which had an enrollment of 525 students. She had 47 classes during 29 of the 35 hours a week the students spent in school. Kroeker felt she could not do her job encompassing the three roles of information specialist, teacher, and instructional consultant as described in the American Library Association's Information Power, Guidelines for School Library Media Programs. With so many scheduled classes, individual students and small groups could not use the library media center. Her LMC was like another

BEST COPY AVAILABLE

classroom where students only go by homerooms for specialized instruction like art or music. (Kroeker, 1989) To find out how other Texas library media centers were coping, she sent out surveys to West Texas schools. Sixty-seven percent of the media centers had weekly scheduled visits, and only two library media specialist said they were pleased with their schedules, both from schools under 150 students. The most common problem mentioned in the comment section was "Providing teachers (with a) conference/preparation period is very undesirable. This causes every hour (all day) to have a class in the library so that the library is almost never available for classes to use for research." (Kroeker, 1989, p.24) Her conclusion for the problem of scheduling was to educate the principals and administrators along with the teachers to the benefits of flexible scheduling and to have them take a different look at the library media center and not group it with art, music, etc., as a special discipline (Kroeker,1989). In the Lincoln (Nebraska) Public Schools, decisions about schedules and staffing were made at the schools by site- based management. After recommendations from a district Library Media Services Study Committee, principals and teachers in these schools found other solutions to provide their teachers with planning times, and made way for flexible schedules allowing the library media centers to be available to the students during most of the day. "This change in attitude occurred because professional staff were

convinced that an integrated library media program was good for students and could not be implemented effectively without some changes." (Willeke & Peterson, 1993:102) When Hutchinson (1986) took over at Sunrise Drive School library in Arizona, she began questioning the validity of teaching library skills in isolation for half an hour a week. After installation of an online circulation system, which took students more time to check out books than before, she had even less time for instruction. She considered increasing the time of the library classes, but then would not have time for the other responsibilities of her position. To gain some insight she first did a literature search. Finding very little information she then sent out surveys to other Arizona schools to identify alternative schedules. High schools and junior highs that responded had few problems because they already had flexible scheduling and the teachers stayed with their class. For the elementary schools "scheduling does not become a major problem until schools reach a certain size. That number appeared to be about 400" (Hutchinson, 1986, p.32). Over half of these schools had negative comments about scheduling and their perceived roles as library media specialists. Hutchinson's solution, after presenting a paper with the education philosophy to the principals and assistant superintendent, was to have a 45-minute, alternate week, class schedule and a block of time teachers could use for special activities. Lack of a weekly scheduled planning time was of high concern

on the teachers part, but the principals were going to find other solutions aside from the LMC. The best solution, according to Hutchinson, was to work with the teachers to develop programs with specific goals and objectives, relating information skills to classroom activities, and to do a good job of public relations (1986).

A very positive note on flexible scheduling came from Ohlrich (1992, p.35) who stated:

> Is flexible scheduling the answer? Yes, yes, yes! I've found it to be. Not the first year I worked with a flexible schedule-that year was really difficult, for none of us had a clear idea how to proceed. The second year was much better...The third year ...we came into our own. The library media program was integrated into the classroom curriculum as a key component, and the library media center was being used more often.

Ohlrich states that the "cross-curriculum philosophy certainly flourishes within the context of flexible scheduling" (1992, p.35). Students see information skills integrated within all subject areas and they retain and use the skills taught within these units. There was still the problem with planning time and convincing the teachers that integration and flexible scheduling could be implemented to their benefit. The library media specialist needs to encourage teachers to sign up and have times available for them, and records need to be kept so that all classes are treated fairly (Ohlrich,1992). Along with these suggestions Haycock, as cited by

McDonald, (1988, p.129) lists guidelines for flexible scheduling:

1. Cooperatively developed programs take precedence for teacher-librarian (LMS) time and available space.

2. Classes are not booked on a regular (Tuesday, 9:30) basis.

3. Total class bookings presume cooperative planning between the teacher-librarian and the teacher and that the two are functioning as partners in the teaching and supervision of the class.

4. Small group bookings may involve cooperative planning followed by either the teacher-librarian and students working together, or independent work on the part of the student for which space and materials have been made available.

5. Individual students are welcome at any time with a library tag (pass): in this instance, the classroom teacher assumes responsibility and is reasonably confident that the student understands and can carry out the specified task, whether it is to select a book for recreational reading or to find information. The teacher also establishes a specific time limit with the student.

These guidelines will be useful when setting up a flexible schedule plan and letting the teachers know the priorities and what to expect ahead of time.

Is flexible scheduling the answer for Whitman School library media center, and will it solve some of the problems supported by the probable

cause data? What does the literature say about the influence on program goals and student outcomes? Buchanan (1991) has been watching flexible programs evolve and has observed the following signs of their effectiveness:

> 1. the increased participation of students, staff, and community in the cooperatively planned media program;
>
> 2. an increase in the quality and creativity of student-produced media related work;
>
> 3. a rise in standardized test scores;
>
> 4. the transfer of learning to public library and middle school media centers, as a result of "real library" experiences; and
>
> 5. the positive attitudes of all involved in the program (p.17)

Buchanan concludes that "With skilled, independent media users, the media staff is better able to use time and therefore provide the full range of services a school library media program of excellence requires" (p.17). In the Whitman LMC we want a cooperatively planned media program, a transfer of learning, independent learners, and a more efficient use of time and facilities. Barron (1993) reminds us that "For years Ken Haycock had told us in the pages of Emergency Librarian, and his book length review of research, that flexible schedules promote student achievement, teacher/library media specialist collaboration and other positive

educationally-sound outcomes." (p.49). Buchanan (1991, p.140) states that "FLEXIBLE SCHEDULING IS NOT THE QUESTION OR THE ANSWER!" She does indicate that it is a necessary element of a school program that supports the marriage of the curriculum with media resources and acceptance of the LMS as an equal partner in resource-based teaching with cooperative planning and integration of information skills into the curriculum.

The second component necessary to remedy the problem of the inability of students at Whitman School to transfer and apply information skills as evidenced by probable cause data would be to integrate skills within the curriculum. Students are not retaining or applying the information skills they learn in one-half hour sessions to their classroom assignments. Integrated curriculum as defined in this paper will mean simply teaching content from two or more subject areas at the same time and interrelating it. Shoemaker's (1989, p.5) definition states that:

> Integrative education is education that is organized in such a way that it cuts across subject-matter lines, bringing together various aspects of the curriculum into meaningful association to focus upon broad areas of study.

Shoemaker (1989) also cites nine models of integrative education which she categorizes under five approaches. Many of these approaches can be used in integrating information skills with the classroom curriculum.

Fogarty (1991) mentions ten different models or views for integrating the curricula, some of which may be more applicable with information skills than others.

Why should information skills be integrated with classroom curriculum? Eisenberg and Berkowitz (1988) comment that high school and college librarians find students lack the ability to use basic library tools even after having library skills since third grade and this "is because library & information skills instruction should not take place in a vacuum...these efforts are generally doomed to failure"(p. 38). They state that these "skills should be integrally tied to the content, activities, and processes of the classroom because they are integrally related to the information needs of students" (Eisenberg & Berkowitz, 1988, p.38). This concept is basic to their Six-Stage Strategy in Curriculum Initiative, which is another option to follow in initiating integrated curriculum. Haycock (1990) sees the same result from a different perspective and states:

> there is no teaching content to a library or resource center, only the process of unlocking knowledge and critical thinking, the process of learning. As a learning resources teacher, the teacher-librarian (LMS) is concerned with those skills which are necessary to the development of motivated independent learners who can locate, analyze and evaluate information in all media formats (p.20).

Skills should be taught in the context of a topic of study, and the content

comes from the classroom curriculum. The U.S. Department of Education(1986) in What Works states:

> The development of student competence in research and study skills is most effective when integrated with classroom instruction through cooperative program planning and team teaching by two equal teaching partners-the classroom teacher and the teacher-librarian (p.24).

The Illinois School Library Media Program Guidelines (1992) state the position that schools adopt an educational philosophy that the library media center is fully integrated into the educational program. Information skills should be taught within the context of the classroom curriculum, and planning between the library media specialist and the classroom teacher is the catalyst that makes it work. That integration of library/information skills within the curriculum works has been known for at least 20 years, why hasn't this concept taken hold and become practice in our schools? (Liesener,1985; Walker & Montgomery, 1992). The reasons are a fixed schedule providing planning periods and lack of time to effectively plan with teachers. This is the reason that having a flexible schedule is so important.

Turner (1991) sees the library media specialist emerging in the role of instructional consultant, as defined in Information Power to begin working with teachers on integrating information skills into the curriculum. This would be a way to get in the door to the classroom and at

the same time "allow the library media specialist the opportunity to discover where the teacher is headed in the instructional process and perhaps influence this direction" (Turner,1991, p.14). Haycock (1990) sees the teacher-librarian as a change agent and the one to take the initiative to plan with colleagues. Often times teacher-librarians presume rejection and never approach the teachers to see if they would like to plan and teach a unit together. What about teachers seeking advice from or asking to team with the library media specialist? Bell and Totten (1992) conclude in their study of Texas schools that "teachers seldom voluntarily choose the library media specialist to cooperate with them on instructional programs and other teacher related factors" (p.48). Other researchers suggest starting small, working with one teacher or grade level, and providing an example of integration to other teachers. Another option is to work with the principal and administration, and site-based management, if it is in place, to create a program plan and goals. Willeke and Peterson (1993) point out that leadership, from both the library media specialist and the principal, is critical to change. "The library media specialist is the leader who fashions the program to fit the unique needs of the school. Library media specialists, teachers, and principals work cooperatively to translate the program into action for the benefit of students" (p.105).

Project Outcomes

The terminal objective of this intervention addresses the problem of Whitman intermediate students not using information skills outside of their "library" class. They did not connect what they were doing in information skills to what they were studying in their classroom. The probable cause data and the solution strategies from the literature search suggest that:

> As a result of the integration of information skills in the curriculum from September, 1993, to April, 1994, the transfer of skills to classroom assignments by intermediate students will increase as evidenced by library media specialist and classroom teacher observations and checklists.

In order to accomplish this terminal objective, the following process objectives need to be put into action for problem resolution:

> 1. Through the implementation of altered access to and use of the library media center from September, 1993, to April, 1994, the intermediate students will be able to access the library media center as independent users and be able to apply information skills to classroom assignments.
>
> 2. Through the collaboration of the library media specialist and the classroom teacher in curriculum planning the intermediate students will be able to connect, transfer, and apply information skills learned in integrated units to other classroom assignments.

Proposal Solution Components

Two very important components need to be set in motion in order to accomplish the terminal objective of having the intermediate students be able to connect and transfer information skills within their classroom assignments. First, the library media center needs to implement a flexible schedule (somehow circumventing the problem planning period) to allow freer access to the facilities and the library media specialist. Students, as individuals or groups, and teachers will be able to use the LMC at any time during the day, for research, book checkout, or the use of new technology. Second, the library media specialist needs to work with intermediate classroom teachers to integrate the information skills into the grade level curriculum. Intermediate students will retain these skills because the skills will be taught in the context of the curriculum and not in isolation. By planning and teaching together, becoming an integral team, the library media specialist and classroom teachers will enable the students to become independent users of the resources of the LMC.

Chapter 4

ACTION PLAN FOR IMPLEMENTING THE SOLUTION STRATEGY

Description of Problem Resolution Activities

The action plan has two components which have to be considered for solution. The first addresses the problem of scheduling the library media center to allow access and the second concerns collaborating with the intermediate teachers on integrated lessons. The action plan depended on a commitment, in the spring of 1993, to the support of the pilot program. In May, sessions were spent with the principal to gain support and to discuss the plan to pilot flexible scheduling in the fall. Two options resulted from these sessions. As pointed out in the literature search, support from the principal and administration is necessary, and at Whitman support was overwhelming. The principal discussed flexible scheduling with the fourth grade teachers and with his support the teachers agreed to pilot a program in the fall. The principal also suggested that the library media specialist become a member of the District Learning Team (DLT) being formed in our building. The team was formed to initiate different teaching strategies and to implement change

from within. The Whitman Intermediate Team (WIT) consisted of one fourth/fifth grade teacher, one fifth grade teacher, one teacher of a fifth/sixth grade class, a bilingual sixth grade teacher and the library media specialist. During the 1993-1994 school year students in the heterogeneous team would be organized in multi-age groupings, and participate in whole, large and small groups for different types of lessons presented by some or all of the team's teachers. Curriculum would be organized in thematic units, work would be done individually or in cooperative groups, and there would be alternative assessment. The Spanish language would also be introduced to the English speaking students. Flexible scheduling with the LMC and integrated curriculum would fit right in with this proposed program. Therefore, both options were agreed upon. A meeting with other members of the intermediate staff was held to discuss the option of flexible scheduling with information skills integration so all intermediate students would be included. There were no further volunteers for the program. Seven out of 14, or half, of the intermediate classes would participate in the pilot program.

In order to have everything in place to start the 1993-1994 school year, planning will start in the spring of 1993, and continue through the summer. The following is a timetable of meetings and strategies to be enacted during that time frame.

1. June, 1993. Meet on predetermined dates with members of the Whitman Intermediate Team to organize and plan curriculum.

2. June, 1993. Meet for a full day each with district-wide representatives from grades four, five, and six, and other library media specialists to go over curriculum and determine where information skills can be integrated into classroom lessons. Discuss the need for flexible scheduling with integration instead of one-half hour lessons each week. This meeting will be planned by the district Library Media Center Curriculum Committee and representatives will be present from all nine elementary schools. Whitman representatives will include both teachers who will be participating in the pilot and some who will not. Those who will not be in the pilot agreed to have some integration of skills but did not agree to flexible scheduling.

3. July, 1993. Begin work on fourth grade curriculum integration, which will be compensated work through the Library Media Center Curriculum Committee. Confer with fourth grade representative to meeting. Organize notes and suggestions from meeting, and research materials to include in unit. Two other library media specialists will work on the fifth and sixth grade curriculums to provide a comprehensive notebook for all library media specialists and grade level teachers on integrated skills.

4. July, 1993. Confer with all fourth grade teachers who will be participating in pilot and set up times in August for formal planning.

5. Early August , 1993. Meet with Whitman Intermediate Team for a full week to work on a thematic unit titled "Change" and on a new social studies unit on the decade of the 50's. Plan a Parent Night to introduce parents and students to the new configuration of this program.

6. August, 1993. Further research the library media center collection and after reading through journals and consulting catalogs order more books and materials to support specific curriculum to be integrated.

7. August , 1993. Meet with fourth grade teachers and present work done on curriculum integration. Plan units together including graphic organizers and alternative assessment where possible.

8. Late August , 1993. Work out a schedule for fixed and flexible library media center times . Write up a newsletter informing the staff of new programs for the year and what would be happening in the LMC.

9. .ate August , 1993. Meet with Whitman Intermediate Team at school for approximately two to three full days to plan future units and methods to integrate information skills, and to finalize parent meeting.

10. August,1993, 7:30 p.m. Schedule a meeting at school with parents and students on the Whitman Intermediate Team. Explain the role

of the library media center with flexible scheduling and integrated curriculum.

11. August 30-31, 1993. Meet with WIT members and fourth grade teachers to schedule first sessions with their classes. Explain organization of calendars and sign-up procedure.

12. September 7-10, 1993. Interview teachers on information skills observed in classrooms. Interview sixth grade students to find out their impressions of LMC use.

13. September, 1993-April, 1994. Meet weekly with members of the Whitman intermediate team to schedule and plan. Other release days will be available each month to plan further thematic units such as "Directions" and "Conflict." A social studies unit on the decade of the 20's will be planned in a Social Studies committee on which two of the WIT members serve. Make plans for types of fund raisers to be held to raise extra funds for field trips.

14. September, 1993 to April, 1994. Meetings with the fourth grade teachers will take place during the flexible schedule times when they have planning periods from art, music, etc. It will be impossible to meet with them at lunch, or before or after school because of other commitments on both sides. Each fourth grade teacher plans units at different times of the year so each of these meetings will be with individual teachers. One advantage is that since not all three classes will

be studying the same subject at the same time, more resources will be available for each class.

During the planning meetings with the fourth grade teachers and the Whitman Intermediate Team, decisions will be made as to how to organize the lessons, who makes up the graphic organizers if needed, who is to teach what segment, what type of assessment is to be used and what will be the criteria, what resources are necessary, how much is to be taught in the classroom, and how much time will be needed in the library media center.

It will be necessary for the library media specialist to be fair to all teachers and to watch how times are scheduled. Lessons may need to be planned further ahead than usual to allow sufficient time for preparation or for special resource acquisition. Care must also be taken to allow enough time in the schedule for the other responsibilities of the library media specialist including teaching 20 other library classes in the building, teaching the Enrichment Program, facilitating new technology, maintaining the book and media collection, and encouraging literature appreciation through the Reading is Fundamental Program. Another responsibility is to attain one of the three building goals set by the Whitman building council this year. The goal is to have all students in grades four through six use and become familiar with the CD-ROM and its various programs which are available in our library media center. This

will be an easy goal to obtain with the seven classes participating in flexible scheduling, but difficult to accomplish with those classes who only meet one-half hour a week.

Methods of Assessment

Various data collection methods will be employed in order to assess the effects of a flexible schedule and the integration of information skills within the grade level curriculum. Students in the seven intermediate classes will be interviewed as to how often they visited the library media center, for what reasons, and if they feel they benefited from the new program. Also, each intermediate student will have a tally sheet of information skills mastered, including the CD-ROM. Teachers will also comment, in interviews, on how they feel the program is doing and whether they observe the students using information skills in their classroom assignments.

Increased group time in the library media center can be measured by counting up total hours on the master schedule, and comparing it to the fixed schedule classes. A sign in sheet for individuals and small groups may be considered for part of the time.

Finally, library media specialist observation, both formal and informal will be used to assess the effects of flexible scheduling and the integration of information skills into the curriculum.

Chapter 5

EVALUATION OF RESULTS AND PROCESS

Implementation History

The terminal objective of the intervention addresses the problem that Whitman intermediate students are not using information skills outside of their "library" class. Library media specialist observation and surveys indicated that the students did not connect what they were learning in their information skills lessons to what they were studying in the classroom. Therefore, the terminal objective stated:

> As a result of the integration of information skills in the curriculum from September, 1993, to April, 1994, the transfer of skills to classroom assignment by intermediate students will increase as evidenced by library media specialist and classroom teacher observation and checklists.

To achieve this terminal objective two process objectives needed to be implemented:

> 1. Through the implementation of altered access to and use of the library media center from September, 1993, to April, 1994, the intermediate students will be able to access the library media center as independent users and be able to apply information skills to classroom assignments.

2. Through the collaboration of the library media specialist and the classroom teacher in curriculum planning the intermediate students will be able to connect, transfer, and apply information skills learned in integrated units to other classroom assignments.

In order to achieve the first process objective, of altered access, support was gained from the principal and sessions were spent brainstorming different options for flexible scheduling. At the same time a group of intermediate teachers were conferring with the principal on forming a District Learning Team. This team would incorporate cross grading of grades four, five and six, team teaching, cooperative learning, integrated thematic units and alternative assessment. The principal thought that the library media specialist would make a good addition to this team and would enable the team to more fully achieve the objective of thematic units with the resources available in the library media center. There was a precedent set as a junior high library media specialist was already on a DLT. The library media specialist met with the team and agreed to join. A sixth grade bilingual teacher also joined the team to bring the number of teachers on the team to five. The team was named the Whitman Intermediate Team. Meetings began immediately, while school was still in session, to set up goals and strategies and to prepare a presentation for approval from the district (Appendix E). At the WIT meeting at 10:00 on June 10, the first focus was on assigning students to

the program homogeneously and getting parental approval. The second meeting, on June 11, included a meeting with the district superintendent in the morning and then, in the afternoon, comparing the curriculum of grades four, five and six, and deciding how to integrate thematic units within this curriculum (Appendix F). On June 14, the assistant superintendent of curriculum and the staff development coordinator met with the team to discuss goals and objectives. On June 15, 1993, the team presented its proposal to the District Learning Team for approval.

In order for the library media specialist to be a significant part of this innovative pilot program there would need to be time to collaborate with the team and yet still service the other classes in the library media center, not to mention time for the other responsibilities of the LMS. Therefore, the LMS proposed two options to the administration:

1. Increase the computer writing teacher position from half to full time, to allow the CWT to work with the library media specialist in the library media center.

2. Add a full-time teaching assistant to work with students under the guidance of the library media specialist.

Either of the options would allow the library media specialist the time to meet with classroom teachers to plan for integrated units, and still provide all teachers in the school with a half-hour planning time (Appendix F).

Approval was given to begin the intermediate pilot program, but funding for additional staff for the library media center was not approved. As a result of our district LMC curriculum committee, two other requests for additional personnel in library media centers had been received by the administration. When these three proposals went before the Board of Education there was negative press (money for books versus money for personnel) and they were denied. Despite the time constraints that would inevitably develop the library media specialist was committed to the pilot program.

At this time the principal was still discussing flexible scheduling with other intermediate teachers and three fourth grade teachers agreed to pilot such a schedule with integrated information skills. To make the program as flexible as possible it was hoped that there would be at least two days of unscheduled time for the seven intermediate classes and three days of scheduled classes for the other 20 classes. The actual schedule could not be confirmed until the schedules for Discovery Center, art and computer were finalized by the district.

Achieving the second process objective of collaboration of the library media specialist and the classroom teacher was an ongoing focus of the district Library Media Center Curriculum Committee, therefore the Whitman LMS would have some peer support in this undertaking. On June 15, 1993, the district library media specialists began their summer

curriculum work and met with classroom teachers representing the fourth grade from each of their buildings. For a total of three days (June 15, 17, and 23, 1993) meetings were held with fourth, fifth and sixth grade teachers to discussed integrating information skills into the classroom curriculum.

As a form of introduction, the skills students would need in the future were brainstormed and discussed in small groups. The three roles of the library media specialist, as noted in Information Power, were clarified and the special responsibilities of the LMS position within the district were noted. Discussions were held on the concept of flexible scheduling and of how it was working in one building in the district. Since the main focus was grade level curriculum, it was discussed in depth. Small groups met and webbed skills with activities. In a large group, each area of the curriculum was charted on newsprint. Under each specific unit were listed the different teaching strategies and methods used, the skills taught in the unit, the various information skills which could be integrated within, and a list of resources which would be required. Specific lessons were duplicated and shared. Resources were examined and items for purchase were listed. This sharing time was of great benefit to the grade level teachers since they often do not have the chance to have articulation with teachers from other buildings. Although the curriculum was the same district-wide the teachers used many

different methods and strategies to teach the subjects to their classes. All three days were very successful and the classroom teachers left, not only with great ideas for the classroom and for integrating information skills but, with a greater understanding of the responsibilities of the library media specialist in their buildings.

For each grade level one library media specialist was responsible for organizing the information to be put in a grade level binder, copies of which would be shared with all grade level teachers and library media specialists. Two further days of compensated summer work were provided for the three library media specialists for this organizational work. The LMS at Whitman was responsible for the fourth grade curriculum information.

During July and August the LMS at Whitman met individually, and in a group, with the fourth grade teachers seeking further input and special considerations for their building and students. As a result sixteen different units were organized for the fourth grade curriculum to contain special activities, unit skills, information skills / LMC involvement and a list of the different resources needed. Also included were sources of information and examples of unit lessons shared at the meeting (Appendix H). At the same time purchase orders were written up and sent in to acquire special resources to go along with these units.

When school began in August the units for all intermediate grades were put together in one binder for the library media specialists and individual copies of each grade level curriculum were provided for teachers. These units proved invaluable during the year when the teachers who did not attend the meeting collaborated with the library media specialists to plan integrated units. It proved to be one of the most valuable outcomes of the Library Media Center Curriculum Committee.

The Whitman Intermediate Team had been meeting on and off during the summer trying to work around everyone's busy schedule. Despite this there were very few times the whole team was together. On June 22, agenda items included outcomes, objectives and standards. Possible themes were brainstormed and three integrated models were selected for use as we began to design our own model. An outline for our curriculum was then developed. The rest of the team met on June 23, as the LMS was working with the LMC curriculum committee. A majority of the team met without the LMS during the week of July 26 through 30, to work on the "Change" theme, including a trip to the Art Institute to develop activities for a field trip.

In order to meet requirements for becoming a DLT the group also had to participate in special district inservice programs. One of these in July was on team bonding, and a second, on August 18, was on integrating across the curriculum and authentic assessment. Two members of the

team were also on a social studies summer curriculum committee and they worked on the "Twenties" circa unit during that time. On August 5, we met with a member of the Illinois Renewal Institute to get input on issues such as scheduling, parent involvement, and authentic assessment.

From August 9 through August 13, we met to work on curriculum but, before this could be done, there was a problem that had to be attended to first. During the summer an influx of fifth grade students moved into the area and numbers were now so large that it was impossible to have a fourth/fifth homeroom as was planned. Now there would be two fifth grade teachers, one fifth/sixth grade teacher, the bilingual sixth grade teacher and the library media specialist. Therefore, the fourth grade curriculum would not be integrated into the overall plan of the thematic units.

It was less complicated working only with two grade levels in curriculum integration, but it meant there would be less cross-grading. After arranging homerooms, the rest of the week was spent on organizing the "Change" unit. Specific plans were made for a large group kick-off presentation to give the students a sense of belonging to the team. Other large groups presentations were arranged in the multi-purpose room and then smaller work groups were organized randomly or by skills. In some instances the LMS was to be in a classroom allowing for smaller group sizes. (Unfortunately the average size of a WIT classroom was up to

twenty-five while the fourth and sixth grades were only nineteen to twenty-two.) Time was also planned for research work in the library media center which would mean forty-five to sixty minutes, not just thirty. Arrangements were made at this time for a Parent/Student night to explain the program and answer any questions. A booklet was put together to hand out that night and to send to parents who could not attend. Our units for the year included: Changes, Directions, Conflict, The 20's, The 50's, Ecology, and a Tour of Countries (6th grade), and a Tour of States (5th grade).

On August 16 and 17, the LMS met with the physical education (PE) teacher who is responsible for coordinating the schedule of PE and music with the district schedule of art and computer writing. The library media schedule had always been filled in last to ensure that teachers had at least one planning time each day, and that most schedules had PE, music and library at the same time each day. An example would be if a teacher had PE Monday and Wednesday at 10:00, music on Tuesday and Thursday at 10:00, then library would be on Friday at 10:00. For those teachers who were not participating in a flexible schedule this plan would continue to be followed. After checking the schedules and trying to be as fair as possible, it was decided that regularly scheduled classes would be on Wednesday, Thursday, and Friday afternoon. Those times which would be flexible would be Monday, Tuesday, and Friday morning. It also meant that

the Enrichment Opportunity Program (EOP) and the Primary Enrichment Program (PEP) would be scheduled during the flexible time. (The prospect of including these programs in a flexible schedule and also encouraging integration within classroom curriculum was later advocated by the district gifted coordinator at the September meeting of the library media specialists.) Copies of the schedule (Appendix I) were provided for teachers and there was only one conflict, which was resolved when the fifth grade class was scheduled on Tuesday at 1:00, for a half hour.

On August 16, a meeting with all fourth grade teachers was held in the LMC to examine the units the LMS had worked on over the summer and to fill out charts on when the subjects would be taught by each teacher. They were informed of what was available in the LMC, what was on order, and they gave input on what further resources they would like to see purchased for the library media center collection.

The Whitman Intermediate Team met again on the 23 and 24 of August and firmed up the plans for the Parent/Student night and the first week of school. On August 24, at 7:30, the meeting was held in the LMC and it went very well.. After the main program components were explained the LMS discussed information skills integration and flexible scheduling of the LMC. Many valid questions were asked by the parents and by the students, who were very excited about being in the program.

On August 30, an institute day, the Whitman Intermediate Team

explained its program to the teachers during a staff meeting. The LMS explained the role of the LMC and some new changes in procedures for the year. The next week a two-page memo went out to teachers repeating some of the new procedures (Appendix J). Attached were two sheets asking for input to help the LMS with scheduling of integrated units and for ordering resources for the LMC (Appendices K and L). These were the same requests that were used with the fourth grade teachers.

On August 30 and 31, the LMS met with both the WIT members and the fourth grade teachers to explain a process for signing up in the LMC for their flexibly scheduled times. There would be a calendar posted in the audio-visual room where they could sign up for a collaborative planning time, a time when they would be working with the LMS with their classes or a time when the LMS would be working with the class alone and giving the classroom teacher a planning time.

During the second week of school the LMS conducted interviews with teachers from both flexible and fixed schedule times to get information on how they perceived their students using information (library) skills in the classroom and on student access to the Whitman LMC. Interviews were also conducted with sixth grade students to find out how they perceived their use of the library media center.

The Whitman Intermediate Team started meeting every Monday afternoon after school to work on daily lessons and plan ahead for whole,

large, and small group sessions. Friday morning meetings were also added to the schedule to reflect on how well lessons went during the week. Scheduling was done in advance for time in the LMC to integrate information skills within these lessons. Many different formats were incorporated into these lessons, and the LMS encountered many new teaching experiences. District guidelines for building teams allowed inservice days for planning, although this also meant time spent to plan for substitutes. WIT members agreed to limit this to one day a month. The Library Media Center and the LMS were now ready to begin the 1993-1994 school year with a combination fixed and flexible schedule and lesson plans collaborated with classroom teachers to integrate information skills within the curriculum.

Presentation and Analysis of Project Results

This action plan addressed concerns or causes of the problem that students were not applying skills learned in the the library media center to classroom assignments. In observations of the fourth grade and Whitman Intermediate Team classes from September, 1993, through April, 1994, focusing on the probable causes previously noted in Chapter Two the library media specialist perceived the following:

1. The intermediate students in the program came to the LMC in small groups or individually, not just with scheduled one-half

hour classes. When they did come with their class it was for integrated lessons for at least forty-five minutes in length.

2. The LMS was able to devote a greater amount of time to help small groups and individuals on those days when the schedule was flexible. When a class was scheduled there was usually another teacher available to help, or the LMC assistant was not totally involved with book check in and out, as would be the case with one-half hour classes.

3. Intermediate grade teachers in the intervention were sending more students and small groups to the LMC when classes were scheduled, if they knew the students could be independent users. In most instances these students were following up on research initiated in integrated lessons in the LMC.

4. Students often came to the LMC for quick information searches using the reference section. After having used these resources frequently during integrated class assignments these students were independent users, could use their time efficiently, and needed little assistance. Teachers were now more willing to send the students to the LMC to check facts and verify what they were learning in the classroom.

5. By April, students in the program were finding information on their own using both the automated and card catalogs and were not relying on assistance from the LMS or LMC assistant. They had greater confidence in their research skills after having numerous opportunities to practice them in class. Students were also more willing to do a search if one of the automated computer stations was available.

6. Forty five minutes to an hour of time for an integrated lesson in the LMC affords the students more valuable learning experiences. Often the students become so involved in their research that they even forget to check books out for pleasure reading.

7. Some intermediate students have been receiving individual instruction on the new technology when they need these resources for specific information in their thematic units.

8. Most information skills taught in context with classroom lessons were retained and used in the next integrated lesson. Some skills were reinforced many times, unlike the half hour scheduled classes where the students were introduced to a concept, but had little reinforced practice.

9. Information skills were taught when needed in the integrated lessons, and not by a time schedule set forth by grade level in a formal scope and sequence program.

10. The library media specialist has become knowledgeable in the intermediate grade curricula and has even helped write thematic units for the WIT program. The LMS collaborated with fourth grade teachers and developed integrated units during the summer for their curriculum and ordered materials to support it(Appendix H).

11. Scheduled times are set aside every week for the library media specialist to communicate with the intermediate grade teachers in the WIT program. Special times are also set aside for the fourth grade teachers. A formal weekly time is of greater value than trying to set up random times in an already full schedule. Planning is too important to be left for chance meetings in the hall, as still occurs with other grade level teachers.

12. Intermediate teachers are learning what the library media center has to offer in the way of materials to support the curriculum.

13. The teachers are requesting more books and audio-visual materials to be ordered, or borrowed from the public library to support their lessons.

14. Some teachers have received inservice instruction on the new technology, including CD ROM, and Prodigy, and the automated catalog. If they have not received formal lessons they are at least familiar with the technology and send their students to the LMC to access it.

15. Teachers in the WIT program teach together in large group presentations, and take turns instructing the students with the library media specialist in the LMC. Some of the fourth grade teachers team with the LMS in their lesson presentations.

16. Those teachers participating in the WIT program, and the fourth grade teachers have given up their regularly scheduled planning times when their students are in the library media center. Most of the time they are with their classes, although there are times when the LMS has offered them a planning time, knowing they could use it.

Those classes not participating in this intervention program benefited to a certain extent. They were allowed to send small groups at any time to the LMC to do research. When these students came they still required the help of the LMS or LMC assistant to find the information they were looking for, or at least to get started in the proper direction. Other classes were also able to send students to check out books on days when the flexible schedule was in effect.

Through this intervention program and the involvement in the Whitman Intermediate Team the library media specialist has had many valuable teaching experiences and has been able to integrate information skills within the curriculum through a variety of strategies. All seven

classes in the program met for forty-five minutes on the first day of flexible scheduling. The LMS explained the new procedures and changes in the former library skills program. The students were very receptive, and liked the idea of being able to spend more time in the LMC. Some of the fourth graders had had extended LMC times the previous year and were glad to have the opportunity to be able to do it again this year. The WIT classes began with encyclopedia and atlas skills that tied in with their study of different forms of government and where the countries were located. The sixth graders then went into detail within their social studies curriculum on Egypt, while the fifth graders worked on colonies. The sixth grade bilingual teacher and the LMS spent time creating a unit for all sixth grade students on map skills, which went into much greater detail than any of the former "library skills" lessons. With one copy in English and one in Spanish the bilingual students had more of a chance to experience success in the lesson.

Two fourth grade classes also started in map and atlas skills, while another researched dinosaurs. This was quite a change for the LMS. Previously only sixth grade students studied the atlas and index in information skills, now it was being taught to fourth and fifth graders within the context of their classroom studies, when it was appropriate. During the course of the next couple of months the atlas was used in many of their classroom assignments and these skills were reinforced. Students

also dropped in to consult the atlas for the school's "Where's Wendy?" contest. It was easy for the LMS to observe that teaching an information skill to the students when they needed the skill for a classroom assignment made much more sense than waiting to teach it in a sixth grade "library skills" lesson that was isolated from the curriculum.

At times, in the WIT program, the LMS was part of a station set-up, where the students went from room to room (thus stations) observing and conducting different experiments. Instead of doing an experiment in the LMC, however, the students learned where to find science books in the general collection and on the reference shelf. This was in preparation for their next LMC visit when they had to do research on a science topic for the team science fair. Later in the year when the students did experiments in chemistry for the "Conflict" unit they knew what science books were available and where to find them. Again they were reinforcing the skills they learned earlier in the school year.

Another format involved students choosing three out of five topics offered to study. The LMS offered a lesson on nutrition math. This incorporated planning meals and snacks for one day from nutrition labels and information from the almanac. The students then calculated the calories and grams of fat consumed on a calculator or computer and entered the information on a graphic organizer. This lesson covered math, health, and information skills such as reading labels, and charts in the

almanac. The lesson was taught to three different groups, and it was one of the most innovative and enjoyable lesson ever taught by the LMS. Over the next few weeks students stopped by the LMC and let the LMS know what they had eaten that day, how many calories of fat they consumed, and how they helped their mom read labels in the store.

Numerous field trips were part of the WIT program. Fund raisers, such as car washes and bake sales, helped to pay for these trips. In assisting with these events the library media specialist developed a greater rapport with the students. The LMC staff also was able to go on many of the field trips. The students researched artists and different artistic periods in the LMC, went to the Art Institute, came back and then created their own artwork for a building art exhibit. After the students did research on Egypt they went to the Field museum and completed packets at the hands-on exhibit. The library media specialist was able to see first hand how multiple intelligences and different learning modalities effect how some students learn. This was very different from the one-half hour a week scheduled library visit.

The LMS also arranged for the students to come to the LMC for a special presentation, such as information on the Rebecca Caudill Award books or a session on what to look for when choosing a book. Students on the team came in often in small groups to complete work begun in class. Many times there were two or three different small groups, including

those on CD-ROM. Both the CD-ROM and Prodigy were used frequently by the students in WIT because they were required to have many different sources, and with thematic units many areas were lacking in the LMC print collection.

When examining the sign-up calendar from September, 1993, to March , 1994, the library media specialist found that, on the average, students in the pilot program spent two hours a month in the LMC in regular classroom groups, the same as fixed schedule classes. Some months it was 45 minutes, other months it was three and one-half hours. This variance was an indication that classes came to the LMC when it was appropriate for their classroom curriculum. This also did not take into account the time the library media specialist taught classes for the WIT skill groups or time spent in large group presentations with the entire team in the multi-purpose room. Small groups were always using the LMC and a sign-up sheet had been provided. Unfortunately, the LMC staff did not always remind or ask students to sign in therefore, it was not a valid indication of small group attendance. Some of these small groups were scheduled in advance, thus on the calendar, but most were not. The same is true of the sign-in sheets by the computers for Prodigy and CD-ROM use. Next year a different system will be considered, as it would be a valuable indication of LMC use.

When interviewed (Appendix M) in April the teachers taking part in

the intervention program were impressed with the progress of their students in information skills. They were requiring more research this year than in past years, and were sending the students to the LMC in small groups more often. One point, that was noted, was that the students were requesting to go to the LMC to do research. A second point, that was emphasized in the interviews, was that the students could do independent searches, and were finding information necessary for their classroom assignments at both the school library media center and the public library. Time spent on searches in the LMC was lessened because the students have had more experience accessing information in the integrated classes. Many students were using sources other than an encyclopedia, such as atlases, sports and other special encyclopedias, chronologies, biographical and geographical dictionaries, Children's Magazine Guide and the vertical file. Students were found to be using more than one source and were checking the copyright dates for the most up-to-date reference work. To find information the students were using the table of contents and the index of non-fiction books. With encyclopedias the students were using the main index, guide words and cross references. Students were beginning to evaluate the different sources and starting to make choices on which source was the best one to check out. Under comments, a teacher mentioned she no longer saw information skills as a separate subject, but as part of the whole curriculum. Another teacher brought up the problem

of the students just copying the information for reports and not putting it into their own words. This will be an area to focus on in the next unit with all students, not just in this one class. One teacher admitted it was a new experience planning with the library media specialist and she liked working with the students with the assistance of another teacher in the room. Having the integrated units available that were done over the summer helped when there was little time during the year for planning and it was always a great starting point.

Students from the WIT program were also interviewed (Appendix N) in April. Groups were randomly chosen when they came to the LMC to work on research. Most of the students stated they liked doing research in the library media center, and they are coming to the LMC more than ever. Some students were allowed more freedom in coming to the LMC than others, depending upon their teacher. There was also concern that some students were given permission more than others, but they needed to discuss this with their teacher. They felt they needed at least one-half hour of time when they came in small groups after beginning a lesson with their class in the LMC. It was easier doing research in small groups because more of the resources were available and they didn't have to wait or share with other students. This was especially true of the new technology. Both the CD- ROM and Prodigy were more available when they came in small groups, unless there was another whole class beginning a

lesson and doing research. These intermediate students, on the whole, stated they could do research in the LMC even when there were large numbers of students using the facilities. Some students found they could not work because there was too much going on and they would rather return to their classroom where it was not as busy.

Students in the WIT program also noted there were never enough resources for their thematic units and the library media specialist admitted this was true. Many of these topics had never been in the curriculum before and even though books had been ordered, not all materials were available or had been received from publishers. Both the classroom teachers and the LMS brought in books from their public libraries or purchased books from bookstores for these units. The students used this material in the library where it was kept on a reserve shelf. They stated they would like to be able to take more materials home, even if just overnight. Some students had even resorted to going to the public library for information. To a few this was no problem, they went often to check out books. Other students said it was an inconvenience and their parents could not always take them. One group being interviewed agreed finding information and studying out of their text books was easier. Many of the bilingual students stated that their teacher provided them with many extra resources or changed assignment criteria. The LMC was able to purchase two sets of encyclopedias in Spanish and ten Spanish/English

dictionaries this year and thus more information was available for them on the reference shelf. Students were also permitted to check these resources out overnight. Many times the students were able to call over to the public library and request titles that were then checked out by the LMS on the institution card. These books came over in the school district van, which includes the public library on it's route. Students were also amazed to find out that they could use the telephone to call for information. After not being able to find information on our reference shelf they often called the public library's information desk. They also found they could call 800 numbers to request materials. One group researching the Surgeon General's office found only the phone number in Washington, D.C., so the LMC clerk called and requested information directly. After the information arrived and was used, it went into the vertical file for future use.

One area of concern for some students was the fact they never had the time to check out library books "just for fun reading" as they put it. This has been a problem because the students are used to regularly scheduled book checkout times. This year they do not always know ahead of time when their class is scheduled in to use the LMC, and they may not have their books at school. There is also the problem that even though books are checked out now for two weeks, if they are overdue they cannot check out other books, even for an assignment. Students are allowed to

check out three books and one overnight book at a time. Open book checkout is all day Monday, Tuesday and Friday morning, but the students would like to see it be any day, any time.

Dialoguing with the students for these interviews was a great opportunity to see their view of the library media center and, in turn, they learned more about what is necessary to provide them with current sources which they required. The interviews worked well in a group format because the students listened to one another and added comments. The library staff found that the students appreciated the time spent with them on extra help if they were frustrated. At the same time the students began to understand why they needed to be independent users of the library media center. Almost all of the students stated they could use the automated catalog to do searches and felt they knew more about the different resources on the reference shelf. They admitted they usually used only the encyclopedia until reminded of other sources. After using some of these sources once they turned to them again on other assignments. Overall they approved of the new format for learning information skills within their classroom curriculum and would like to continue even if it was more work than in previous years.

Before beginning a lesson with one of the fourth grade classes the LMS asked them to do a short poll, answering questions by a show of hands. When asked if they liked the program better this year than last

year almost all raised their hands. The LMS then asked a few more detailed questions. In answering the question "Why do you like this year's program better?" the students pointed out that they finally got to spend time in the library media center, they were able to do their homework at school, and they were working in groups to do research. The students agreed that learning in the LMC was fun, that they enjoyed using the automated catalog to look for books, and there was never enough time to use CD-ROM and Prodigy in small groups. They did want to continue to have this type of LMC program as fifth graders.

Evaluation of individual students is being accomplished through a check list of skills (Appendix P). This form is kept in their LMC folder and periodically the LMS meets with each student to evaluate their progress and check off their accomplishments. If the student has only been introduced to the skill an I is used , if they have practiced the skill, a P is marked and if they have mastered the process, an M is entered. Students in the program have mastered more of the skills as compared to those with a fixed schedule. To check the progress of students on becoming independent users of the automated catalog a peer evaluation assessment sheet is used (Appendix O). This has really been successful and the same format will also be implemented when the assessment of the CD-ROM is given in May.

Reflections and Conclusions

The intervention was a success in that the intermediate students in the program transferred and applied information skills to classroom assignments. This was accomplished by the means of an altered access or flexible schedule, and integration of information skills with grade level curriculum through teacher/library media specialist collaboration. Both were critical components in that one was difficult to implement without the other. The project could have been implemented with just integration of information skills, but not as successfully.

This program had its inception through the Library Media Center Curriculum Committee with its continuing goal of program integration. The collaboration of the other library media specialists in the district and their help through the summer curriculum work was instrumental in developing the program. Without the support of the principal and help in recruiting teachers for the program, it would have been difficult to implement this intervention.The administration's position on District Learning Teams to initiate change within buildings came about at an opportune time so that the LMS could become a member of a team and accomplish even more than had first been envisioned. Finally, this program could not have been accomplished without the cooperation of the seven classroom teachers who were willing to try change, give up a regularly scheduled weekly planning time, and spend time in the summer,

and during the school year, with the library media specialist to plan integrated lessons.

Implementation of this intervention has shown that flexible scheduling has allowed freer use of the LMC and students in the program are able to retain information skills taught within their curriculum to their classroom assignments because they are connected to what they are learning.

Chapter 6

DECISIONS ON THE FUTURE

The Solution Strategy

The data and observations indicate that the implementation of a flexible schedule and integrated curriculum should be continued. The students are applying the skills they learned in an integrated library media program to their class work. These same students are even applying these skills at the community's public library. In the future there will be a greater need for information skills and for one to be an independent user of the library, whether it be in a school or at a community, college, or business library. The need to be familiar with new technology and how to access it for information is extremely important and should be started early and reinforced constantly. Integration of information skills must continue to be relevant to students, there can be no ownership unless it applies to their classroom assignments. To accomplish this the schedule of the library media center must provide opportunity for continual access to resources.

Additional Applications

Not only should the students in the fourth, fifth, and sixth grade pilot programs have the opportunity to use the library when they need to, but all students in the school should be able to access it at any time. I would like to see a more open schedule throughout the week. All students should be able to check out books at any time, along with having a set time once a week. Students should be able to come to the library in small groups to do research whenever the curriculum dictates it. This year first grade readers have been coming to the LMC to do research on animals. They come with outlines and graphic organizers to search for specific information. They are introduced to general encyclopedias, special animal encyclopedias, Zoo Books and the National Geographic CD-ROM, Mammals. Their excitement for learning is unbelievable. They have gained access to information in the LMC which is relevant to their classroom curriculum. This needs to be applicable to small groups at every grade level.

Next year I would prefer to have all intermediate classes on a flexible schedule. Many teachers have already requested extra time to do more research activities after seeing the benefits of the intervention program. The question remains, "Will they give up a weekly scheduled planning time?" If this would not be possible, a second option would be to have those classes not participating in a flexible schedule sign up for one hour every other week. This would at least increase their learning and

contact time and integration could be accomplished. This has already been discussed with third grade teachers. I would collaborate with them and begin integration of information skills within their curriculum. This year I have been teaching first and second graders more "library skills" than in previous years so that they know most of the basics by third grade. In third grade I would be able to include information skills that have been done in previous years with fourth and fifth graders.

The addition of new technology in the school will exert more pressure for the best use of the library media center. With the recent purchase of a Lapis-TV (which allows the computer monitor to be presented on a large screen television) whole group instruction has been greatly facilitated. After large group presentations the students may come to the LMC in small groups for hands-on instruction. The equipment also aids in presenting staff development workshops on new CD-ROM technology and to keep the teachers current with what the students are learning.

At the present time program plans for the 1994-1995 school year are being considered to include increased LMC staff. A proposal has been submitted to the administration and school board requesting that the computer writing teacher become a full time technology support specialist working on an equal basis with the library media specialist in the library media center /computer lab. If this proposal is accepted it

would mean an even greater opportunity for change and flexibility within the LMC. Again, the only problems would be with scheduled planning time as the computer writing teacher also provides one hour a week for one semester and is scheduled back to back with art classes. Our vision of an ideal program would include integration with the classroom curriculum and information skills, research in the LMC with print and technology resources, and a finished product being completed in the computer lab.

When they reach the intermediate grades I think the students need more guidance in how to evaluate and process the information they retrieve and in how to prepare and present this information. It is necessary to include more authentic assessment on the skills needed to process and organize information gathered through research. Students need to evaluate the information they find, not just copy it down.

Dissemination of Data and Recommendations

Our district Library Media Center Curriculum Committee has had one meeting with the administration and building principals on November 15, 1993. At this meeting many of our concerns over staffing, flexible scheduling, integration, collection and facilities became better known. We broke into small groups and shared what was going on in our buildings and what we hope to accomplish for the year and in the future. The district wanted to know what our visions were and what we needed in

support to make these visions a reality. Compared to others, our district is out in front when it comes to valuing Library Media Centers. I appreciate knowing there is support for our program.

Along with continued sharing of this intervention with fellow library media specialist and administration in the district I plan to share my experiences with other librarians at conferences and work shops. As a member of the Illinois School Library Media Association I attend their conferences every year in October/November. They offer many open sharing sessions along with official presentations where I might share my results of this intervention.

Integration of information skills with classroom curriculum and flexible scheduling are major goals for library media specialists. I think it is well worth the effort to encourage change in the status quo to achieve these goals. Implementation of these goals will take longer than one year and will be a time consuming effort with more time necessary for curriculum development, planning, teaching, and more frequent use of the library media center. If possible, extra staff should be considered. The program might be somewhat traumatic in dealing with those who resist change, but these efforts will result in our students becoming life-long learners and independent library users, which is our ultimate goal.

References Cited

Ackerman, D.B. (1989). Intellectual and practical criteria for successful curriculum integration. In Jacobs, H.H. (Ed.) Interdisciplinary curriculum: Design and implementation. (pp.25-37). Association for Supervision and Curriculum Development.

American Association of School Librarians and Association for Educational Communications and Technology. (1988). Information power: Guidelines for school library media programs. Chicago: American Library Association.

Barron, D.D. (1993). Let's tell them! Together! Individual and association activity for change. School Library Media Activities Monthly, 8, 49-50.

Barron, D.D. (1992). Recent research and the school library media specialist. School Library Media Activities Monthly, 4, 47-50.

Barron, D., & Bergen, Jr., T. (1992). Information power: The restructured school library for the nineties. Phi Delta Kappan, 3, 521-525.

Bell, M., & Totten, H. (1991). School climate factors related to degrees of cooperation between public elementary school teachers and school library media specialists. Library Quarterly, 61:3, 293-310.

Bell, M. & Totten, H. (1992). Cooperation in instruction between classroom teachers and school library media specialists: A look at teacher characteristics in Texas elementary schools. School Library Media Quarterly, Winter, 79-85.

Brown, J. (1990). Changing teaching practice to meet current expectations: Implications for teacher-librarians. In Haycock, K. (Ed.), The school library program in the curriculum. (pp.35-39). Englewood,CO. Libraries Unlimited.

Brown, K.S. & Burton, L. (1989). Timing is everything, adapting to the flexible schedule. School Library Journal, Dec., 20-23.

Buchanan, J. (1991). Flexible access library media programs. Englewood, CO: Libraries Unlimited.

Callison, D. (1986). School library media programs and free inquiry learning. School Library Journal, Feb., 20-24.

Cleaver, B.P. & Taylor, W.D. (1983). Involving the school library media specialist in curriculum development. Chicago: American Library Association.

Donham van Deusen, J. (1993). The effects of fixed versus flexible scheduling on curriculum involvement and skills integration in elementary school library programs. School Library Media Quarterly, spring, 173-182.

Eisenberg, M.B., & Berkowitz, R.E. (1988). Curriculum initiative: An agenda and strategy for library media programs. Norwood, N.J.: Ablex Publishing.

Evert, M. (1992). Developmental interdisciplinary schools for the 21st century. Education Digest, 3, 57-59.

Fogarty, R. (1992). 10 ways to integrate curriculum. Education Digest, 2, 53-57.

Haycock, K. (1990). The school library program in the curriculum. Englewood, CO: Libraries Unlimited.

Henri, J. (1990). The integrated approach to school library programming. In Haycock, K. (Ed.) The school library program in the curriculum. Englewood, CO.: Libraries Unlimited.

Hopkins, D.M. (1989). Elementary school library media programs and the promotion of positive self-concepts: A report of an exploratory study. Library Quarterly,59:2, 131-147.

Howard, N.J. (1989). Integrated study units cooperatively developed by the classroom teacher and the media specialist to facilitate the development of library research skills. ERIC Digest. Report No. Ir 052 935. Syracuse, NY: ERIC Clearinghouse on Information Resources. (ERIC Document Reproduction Service No. ED 311 936).

Hutchinson, B. (1986). School library scheduling: Problems & solutions. School Library Journal, Dec., 30-33.

Illinois Library Association & Illinois School Library Association. (1992). Illinois school library media program guidelines. Chicago: Illinois Library Association, 88.

Jobe, R. (1990). Teacher-librarian collegiality: Strategies for effective influence. In Haycock, K. (Ed.) The school library program in the curriculum. Englewood, CO.: Libraries Unlimited.

Krimmelbein, C. J. (1989). The choice to change, establishing an integrated school library media program. Englewood, CO: Libraries Unlimited.

Kroeker, L.H. (1989). Behind schedule, a survey of West Texas Schools. School Library Journal, Dec., 24-28.

Lamb, A. (1992). Getting into the classroom: Integrating library media activities in the curriculum. In Walker, H.T. & Montgomery, P.K. Library media and information skills. Santa Barbara: ABC-CLIO.

Liesener, J.W. (1985). Learning at risk: School library media programs in an information world. School Library Media Quarterly, fall, 11-20.

Loertscher, D.V. (1988). Taxonomies of the school library media program. Englewood, CO: Libraries Unlimited.

Loertscher, D.V., Ho, M.L. & Bowie, M.M. (1988). "Exemplary elementary schools" and their library media centers, a research report. In McDonald, F.B. (Ed.) The emerging school library media program. (pp. 68-82) Englewood, CO.: Libraries Unlimited.

Lundin, R. (1990). The teacher-librarian and information skills-an across the curriculum approach. In Haycock, K. (Ed.) The school library program in the curriculum. Englewood, CO.: Libraries Unlimited.

Mansfield, B. (1989). Students' perceptions of an integrated unit. The Social Studies, 7, 135-140.

Marland, M. (1990). Libraries, learning, and the whole school. In Haycock, K. (Ed.) The school library program in the curriculum. Englewood, CO.: Libraries Unlimited.

McDonald, F.B. (1988). The emerging school library media program, readings. Englewood, CO: Libraries Unlimited.

McGovern, J. (1992). A plan for integrating information and thinking skills into the curriculum. In Walker,H.T. & Montgomery, P.K. (Eds.) Library media and information skills. Santa Barbara: ABC-CLIO.

Montgomery, P.K. (1992). Integrating library media, research, and information skills. Phi Delta Kappa, 3, 529-532.

Ohlrich, K.B. (1992). Flexible scheduling, the dream vs. reality. School Library Journal,May, 35-38.

Ormondroyd, J. (1988). Course integrated library instruction. ERIC Digest, Report No. EDO-IR-88-8. Syracuse, NY: ERIC Clearinghouse on Information Resources. (ERIC Document Reproduction Service No. 306 960)

Pearce, V. & Lassiter, C. (1992). The media/social studies connection: Partnerships for learning. Wilson Library Bulletin, 9, 59-60.

Pickard, P. W. (1990). The instructional consultant role of the school library media specialists: A research study. ERIC Digest, Report No. 21. Syracuse, NY: ERIC Clearinghouse on Information. (ERIC Document Reproduction Service No. ED 328 276)

The sourcebook of zip code demographics, census edition. (1991). Arlington, Va.: CACI Marketing Systems.

Stripling, B.K. & Pitts, J.M. (1988). Brainstorms and blueprints, teaching library research as a thinking process. Englewood, CO.: Libraries Unlimited.

Thompson, J.C. (1992). Resource-based learning can be the backbone of reform, improvement. NASSP Bulletin, April, 24-28.

Thompson, K. (1989). Leadership roles in the curriculum: The challenge. Illinois Libraries, 71, 5-6.

Turner, P.M. (1991). Information skills and instructional consulting; A synergy? School Library Media Quarterly, fall, 13-18.

U.S. Department of Education. What works: Research about teaching and learning. (1986). Washington, D.C. U.S. Department of Education.

BEST COPY AVAILABLE

Walker, H.T. & Montgomery, P.K. (1992). Library media and information skills. Santa Barbara: ABC-CLIO.

Willeke, M.J. & Peterson, D.L. (1993). Improving the library media program, a school district's successful experience with change. School Library Media Quarterly, winter, 101-105.

APPENDICES

Appendix A

LIBRARY MEDIA CENTER SURVEY

The following questions refer to times other than your regularly scheduled half hour visit . Please circle your answers.

1. How often do you send individuals to use the Library Media Center at any time?

   frequently sometimes never

2. How often do you send small groups to use the Library Media Center at any time?

   frequently sometimes never

3. How often do you schedule small groups in advance into the Library Media Center?

   frequently sometimes never

4. How often do you schedule class visits for special instruction on a classroom assignment?

   frequently sometimes never

5. How often do you schedule class visits for extra book checkout ?

   frequently sometimes never

6. How often do you request the Library Media Center for special class or grade level use?

   frequently sometimes never

7. How often do you consult with the Library Media Specialist for instructional planning?

   frequently sometimes never

8. How often do you check out materials for classroom use ?

frequently sometimes never

9. Do you inform the Library Media Specialist of your units so that materials can be available for you and your students?

frequently sometimes never

10. Do you assist in the selection and evaluation of materials?

frequently sometimes never

11. Do you have enough resources in your room to support your curriculum?

frequently sometimes never

12. Do you team teach with other teachers in the building?

frequently sometimes never

13. How important to you is a scheduled half hour planning time during Library Media Center?

very somewhat not very

14. What is your opinion of the communication between the teachers and the Library Media Specialist?

excellent good O.K. needs improvement

15. Do you see students in grades 3 through 6 using information skills in their classroom assignments?

frequently sometimes never no opinion

If access to the Library Media Center were not an issue how do you think you would use those facilities and resources in your teaching?

LIBRARY MEDIA CENTER SURVEY RESULTS

The following questions refer to times other than your regularly scheduled half hour visit . Please circle your answers.

1. How often do you send individuals to use the Library Media Center at any time?

   frequently 0 sometimes 17 never 6

2. How often do you send small groups to use the Library Media Center at any time?

   frequently 3 sometimes 12 never 8

3. How often do you schedule small groups in advance into the Library Media Center?

   frequently 0 sometimes 9 never 14

4. How often do you schedule class visits for special instruction on a classroom assignment?

   frequently 3 sometimes 6 never 14

5. How often do you schedule class visits for extra book checkout ?

   frequently 1 sometimes 5 never 17

6. How often do you request the Library Media Center for special class or grade level use?

   frequently 2 sometimes 8 never 13

7. How often do you consult with the Library Media Specialist for instructional planning?

frequently 2 sometimes 17 never 4

8. How often do you check out materials for classroom use ?

frequently 14 sometimes 9 never 0

9. Do you inform the Library Media Specialist of your units so that materials can be available for you and your students?

frequently 7 sometimes 13 never 2

10. Do you assist in the selection and evaluation of materials?

frequently 4 sometimes 11 never 7

11. Do you have enough resources in your room to support your curriculum?

frequently 3 sometimes 12 never 7

12. Do you team teach with other teachers in the building?

frequently 8 sometimes 10 never 4

13. How important to you is a scheduled half hour planning time during Library Media Center?

very 14 somewhat 6 not very 2

14. What is your opinion of the communication between the teachers and the Library Media Specialist?

excellent 10 good 8 O.K. 3 needs improvement 1

15. Do you see students in grades 3 through 6 using information skills in their classroom assignments?

frequently 6 sometimes 9 never 1 no opinion 5

If access to the Library Media Center were not an issue how do you think you would use those facilities and resources in your teaching?

Comments from teachers on survey

Comment 1.
Students would be sent more frequently to research in small groups. They would also be able to check out a new book as soon as they finish one.

Comment 2.
Sometimes, but very often, if holdings were better in Spanish. Dictionaries, encyclopedias, non-fiction, and other reference materials.

Comment 3.
I would like to use the LMC much more. I would bring down my entire class for classroom instruction and then have the class do research. I would also like to send down a different small group everyday for a week to do research. I won't give up my scheduled break, however, we have worked too hard for it.

Comment 4.
Would do some research-based activities and assignments in the LMC rather than in the classroom.

Comment 5.
I would plan as a free time activity for certain students to use the center.

Comment 6.
Research materials-reports.
Use of supplemental material for reading units.
Use for drama presentations.
For special read-in days

Comment 7.
Would probably use it much more frequently.

Comment 8.
If there were more assistance for the LMC person the LMC would be used even more.

Comment 9.
Whenever necessary given scheduling freedom.

Comment 10.
Sending students to use reference books available in the LMC.

Comment 11.
Yes

Comment 12.
I would take my kids regularly to show them how to get information from reference books for classroom assignments, or just to have fun finding out about things that interest them, just like grown-ups do!

Comment 13.
I find it is available to me and use the facilities and resources as often as I need to to reinforce and supplement my program. Our library media specialist is very helpful and cooperative. She is very supportive to our program. Our library clerk also works well with the children and is very supportive.

Appendix B

LIBRARY MEDIA CENTER STUDENT SURVEY

1. How many times do you come to the LMC during the week?

   once two or three four or more

2. Can you do a search on the automated catalog without help?

   yes no

3. Can you find a book using the card catalog by yourself?

   yes no

4. Can you list books other than an encyclopedia that are on the reference shelf?

   yes no

5. Do you know how to use the resources of the LMC, but still ask for help from the librarian because it is quicker.

   yes no

6. Have you ever asked the teacher for permission to come to the LMC to find information for a class assignment?

   yes no

7. Has your teacher ever sent you to the LMC in a small group to do research?

   yes no

8. Would you like to come to the LMC to do research on a class assignment?

   yes no

9. Does your teacher have extra information in the classroom on the units you are studying?

yes no

10. Do you visit Indian Trails Public Library for information on class assignments?

yes no

11. How many books do you check out on a subject you are studying in class?

one two three

12. Have you ever checked out an encyclopedia over night?

yes no

13. Have you ever used the CD ROM in the LMC?

yes no

14. How many books do you read a week?

none one two three four or more

15. Would you read more if you could come check books out at any time from the LMC?

yes no

LIBRARY MEDIA CENTER STUDENT SURVEY RESULTS

1. How many times do you come to the LMC during the week?

   once 36 two or three 14 four or more 0

2. Can you do a search on the automated catalog without help?

   yes 36 no 14

3. Can you find a book using the card catalog by yourself?

   yes 50 no 0

4. Can you list books other than an encyclopedia that are on the reference shelf?

   yes 37 no 13

5. Do you know how to use the resources of the LMC, but still ask for help from the librarian because it is quicker.

   yes 30 no 20

6. Have you ever asked the teacher for permission to come to the LMC to find information for a class assignment?

   yes 25 no 25

7. Has your teacher ever sent you to the LMC in a small group to do research?

   yes 25 no 25

8. Would you like to come to the LMC to do research on a class assignment?

   yes 47 no 3

9. Does your teacher have extra information in the classroom on the units you are studying?

yes 45 no 5

10. Do you visit Indian Trails Public Library for information on class assignments?

yes 32 no 18

11. How many books do you check out on a subject you are studying in class?

one 7 two 32 three 11

12. Have you ever checked out an encyclopedia over night?

yes 17 no 33

13. Have you ever used the CD ROM in the LMC?

yes 19 no 31

14. How many books do you read a week?

none 4 one 15 two 17 three 6 four or more 8

15. Would you read more if you could come check books out at any time from the LMC?

yes 33 no 17

Appendix C

TEACHER INTERVIEW

1. What specific information (library) skills do you see your students using in your classroom?

2. What skills do you feel they are lacking at your grade level?

3. Do you require research on classroom assignments?
   Can this be accomplished with your classroom resources?

4. If the LMC were open to small group research, how often would you send students to use the resources?

5. What would you suggest to make the LMC more available to the students?

6. Do you see indications that your students use the public library?

7. Do you feel the students are learning information skills in one-half hour a week? Do you think they can apply what they learn to other situations?

Do you have any comments ?

Appendix D

STUDENT INTERVIEW

1. Do you like doing research ? (finding information in books)

2. Do you do research in your classroom?

3. Does your teacher ever send you to the LMC to do research? Why not?

4. When do you do research in the LMC?

5. Do you go to Indian Trails Public Library to do research?

6. Do you feel you can find information independently? What do you feel you need help with?

7. Would you like to do more research in the LMC?

8. Do you feel the LMC has information that your classroom does not?

9. Why do you think we study library or informations skills? When do you think you will use them?

Appendix E

WHITMAN INTERMEDIATE TEAM

Our mission is to increase the relevance of the curriculum, reduce fragmentation of both the curriculum and the population, allow for better management of learning, and develop in children a greater awareness of the world around them.

DISTRICT LEARNING TEAM PROPOSAL

School: Walt Whitman

Team Members: Michelle Moran
Rosemarie Meyer
Connie Hunter
Kristi Stearns
Pam Lindberg
Ralph Cook

How do you envision your team working differently from the way you've worked in the past?

1. Team planning.
2. Peer coaching.
3. Facilitating and instructing students in a variety of groupings (individual, small, large, whole).
4. Foreign-language instruction.
5. Cross-grading.
6. Integrating bilingual and mainstream classes on a larger scale.

How are you going to deal with the organizational needs of students?

1. Incorporating study skills and other learning tools throughout the curriculum.
2. Flexible scheduling with LMC and Computer Lab.

How are you going to deal with the academic needs of students?

1. Integrating curriculum---- including higher-order thinking skills and metacognition.
2. Alternative assessment.
3. Information gathering.
4. Developmentally appropriate activities.
5. Emphasis on process as well as product.
6. Transfer of learning to real-world experiences.
7. Empowering students to become active members of their community.

How are you going to deal with the social needs of students?

1. WIT time.
2. Responsibility for themselves and others.
3. Sense of community.
4. Parent involvement.

How are you going to vary your instructional delivery to deal with these components?

A. Interdisciplinary Instruction- Use of a variety of models including our own design. Broad units and themes that encompass all disciplines.

B. Society-based instruction- Problem solving. Real life situations. Cross-cultural.

C. Real-life Applications- Expand educational experience through field based activities. Real world transfer and action plan.

D. Problem-solving - across curriculum.

E. Critical Thinking Skills- across curriculum. Higher-order thinking skills.

F. Cooperative Learning- Base groups, random groups, cross-grading.

G. Technology- Flexible schedule with LMC.

*More specific design and implementation will evolve as the program develops.

How will you redesign assessment of self-assessment, authentic, and alternative assessments?

1. Portfolio: short- and long-term.
2. Self and peer evalution.
3. Cooperative group assessment.
4. Formative and summative evaluation.
5. Process journals.
6. Observation and behavioral checklists.
7. Teacher-made test projects -- allowing for higher-order thinking and different learning modalities.

How will you provide for different grouping and interaction of students?

1. Flexible grouping and interactions of fourth-, fifth-, sixth-grade and bilingual students.
2. Individual, small-group and whole-group activities.

What physical or structural changes will you need to facilitate your team working together?

1. Help with scheduling specials.
2. In the future, getting room assignments closer together.
3. Use of multi-purpose room.
4. Use of LMC and computer lab.
5. Movement of students within the team.
6. Late bus for extra activities.

What special needs do you think your team will have?

1. Common planning time.
2. Release time once a month.
3. Ways to finance bus and field-trip expenses.
4. Additional facilitators and training for WIT time.
5. Assistance with problem-based and society-based learning.
6. Release time and sub pay to attend conferences or visit other magnet schools.

What questions do you need answered?

1. May we have fund raisers to earn extra money for our field trips and other learning experiences?
2. Will we be provided with a teaching assistant or part-time teacher in the LMC?
3. How and when will stipends be allocated?
4. Will there be sharing time with other DLT's?

RATIONALE FOR INTERMEDIATE PILOT PROGRAM:

Traditional teaching techniques are failing to meet the needs of students in a rapidly changing society. Integrating the curriculum, with the inclusion of authentic assessment, cooperative learning, higher-order thinking skills, and cross grading will help students make connections. Within any given classroom students have diverse interests, learning styles, and intellectual abilities. It is necessary to focus on the variety of intellectual abilities. Cohen states, " None of us has all of these abilities but each of us has some of these abilities. To get the job done we need to rely on each other. This is at the heart of a multi-ability classroom. " Therefore, it is important to create a variety of learning experiences that promote student motivation and also begin to show students the relationships between the disciplines.

Integration represents a continuous circle of skills, themes, concepts, and topics across the curriculum. There are distinct advantages in designing and implementing integrated curriculum models. First, this approach deemphasizes the use of textbook and workbook drills by allowing coordination of assignments and activities. Second, integration helps students make their learning more relevant. Another advantage is that it helps students justify reasons for their answers, solve problems, analyze relationships, and to understand how they learn as well as what they learn.

In conclusion, we believe that this intermediate pilot program will increase the relevance of the curriculum, reduce fragmentation, allow for better management of learning, and develop in children a greater awareness of the world around them.

Whitman Intermediate Team

Goals and Outcomes

We will use Appendix B of State Goals for Learning as of October 1992.
In addition students will:

1. develop and practice social skills which include interacting cooperatively, using conflict resolution, respecting viewpoints and ideas of others, valuing differing roles, abilities, and contributions within group situations.
2. listen critically and analytically.
3. assess their own strengths and weaknesses.
4. become active participants in the learning process.
5. practice self-directed learning.
6. use a variety of learning strategies and evaluate which are appropriate for a particular learning modality and/or specific activities.
7. access information from multiple sources using state of the art technology, as well as print material.
8. evaluate the available sources of information to determine the most appropriate for their defined task.
9. utilize various resources to extract needed information.
10. organize information from multiple sources to complete a defined task.
11. integrate information and the use of a variety of resources in creating a product for the curriculum in the classroom.
12. use written and spoken language effectively for a variety of formal and informal situations to communicate ideas and information.
13. identify the differences among poetry, drama, fiction, and non-fiction.
14. make connections from the past to the present and predict the impact these times will have on the future.
15. understand divergent cultures and the influence they have on local, national, and global communities.

WALT WHITMAN INTERMEDIATE PILOT PROGRAM :

This program will involve about 26 percent of the fourth, fifth, and sixth graders at Whitman.

Program goals and objectives:

1. Develop specific outcomes to meet student needs (based on school improvement plan)

2. Integrate the curriculum using a variety of models as well as team developed models

3. Developmentally appropriate activities , with an emphasis on process as well as product

4. Use of alternative assessment

5. Cross grading

6. Cooperative learning,including the teaching of social skills

7. Emphasis on higher order thinking skills

8. Flexible scheduling of the LMC

9. Parent involvement (contracting, active participants,)

PROGRAM FUNDING :

1. 75 hours of summer work at $ 16 an hour or $ 80 a day.
   Dates scheduled to meet...June 10 PM, June 11, June 22 and 23, July 26-30, Aug. 9-13, Aug. 23 and 24 (PM only)

2. Release once a month in the afternoon for team planning
   (sub pay x 8 days x each team member)

3. Visitation of magnet schools (sub pay)

4. Attending appropriate conferences (expenses)

TEAM MEMBERS :

Kristi Sloan Michelle Moran Connie Hunter

Rosemarie Meyer Pam Lindberg Ralph Cook

Wit Pilot Program

Multi-cultural Cooperative learning Social skills Various integrated models

"HOTS" Alternative assessment Learning modalities Multiple intelligences

Information gathering Study skills IGAP Establish standards/expectations

Reading and Writing

4th	5th	6th	All
Social studies: explorers colonization regions-(jigsaw) Illinois history government	Social studies: Revolution Constitution government Civil War "Circa" units: the 20's the 50's	Social studies: linking past to present components of civilization ancient civilizations world tour: roots "side trips"	Working field trips spelling, high frequency, most frequently misspelled words "Circa" folk/fairy tales myths fines arts Spanish government thread past to present natural science machine/inventions WIT time interest groups possible themes: "Change" "War and Peace"
Science: digestive system plants animals universe food groups nutrition	Science: vertebrates invertebrates systems of the body electricity health sex education	Science: chemistry ecology nervous/endocrine system adaptations, biomes	
Reading themes: biography realistic fiction historical fiction, (Laura I. Wilder) mystery dinosaurs folk tales fantasy	Reading themes: space operation wildlife realistic fiction fairy tales long ago & far away	Reading themes: Egypt oceans fables and folk tales realistic fiction survival	

Appendix 6

WALT WHITMAN SCHOOL
4TH, 5TH, 6TH PILOT PROGRAM
ROLE OF THE LIBRARY MEDIA SPECIALIST

In order to contribute significantly to the 4-5-6 pilot program in the areas of program planning with curriculum integration, teaching models, team teaching, and authentic assessment, the Library Media Center (LMC) needs to have some flexibility built into the schedule. One of the major goals in the LMC for the 93-94 school year is to implement a type of flexible schedule to allow information skills to be integrated into the curriculum. The library media specialist (LMS) is committed to being a part of this pilot, yet at the same time it would be unfair to curtail planned programs for those students not involved in the pilot.
To eliminate this problem and to increase the availability of the LMC for all students and teachers we are requesting additional personnel. Whitman has two options, either of which would help facilitate both the pilot program and the goal of providing flexible access to the Library Media Center.

OPTION 1

Increase the Computer Writing Teacher to a full time position within our building. Fifty percent of the time would involve teaching the Computer Writing program and the other half would be teaching in the Library Media Center. This would include planning and initiating instruction in the areas of large and small group technology, coordinating the use of MECC programs for remedial, drill or enrichment activities, and teaching the Primary Enrichment Program. This would provide the LMS with time to meet and plan with teachers on integrating the curriculum within the pilot program and with other fourth, fifth, and sixth grade classroom teachers. This would also allow larger blocks of time to be scheduled for these classes. Other pluses would be to provide for flexibility in scheduling Computer Writing classes throughout the week, including make-up times, and having another teacher available who has expertise in computer technology which is essential at this point in time. Our PTO is

committed to providing Whitman with computers in every classroom as soon as possible. It also won't be too long before we

are networked building wide. A second technology person can help conduct teacher inservice and can provide backup with technological problems on a daily basis.

OPTION 2

A full-time teaching assistant in the LMC to work with students under the guidance of the LMS. While the LMS is planning with grade level teachers or team teaching with the pilot teachers the assistant would :

1. help with small group instruction
2. work with groups in the computer lab
3. read books for primary story time and supervise book checkout
4. provide help with book selection with students in grades 3-6
5. help small groups sent in for research.

Either option assures:

1. a more flexible schedule
2. equal access by all students to new technology
3. the LMS will be available to collaborate and to integrate information skills into the curriculum and plan for alternative assessment with classroom teachers
4. a chance to monitor student progress in a time span of more than one-half hour a week
5. students in grades three through six can check out books anytime during the week, and not on a fixed schedule

RATIONALE

It has been documented by studies that access to the library media collection is the single best school predictor of student achievement. According to the Colorado Department of Education Bulletin dated April 8, 1992, "Students who score higher on standardized tests tend

to come from schools which have more accessible library media programs." Whitman students need to learn information skills necessary for inquiry, informal decision making, and life long learning, within the curriculum. These skills are not acquired in an isolated one-half hour a week scheduled library time. There needs to be open or flexible access to the resources in the library. For thirty years now school libraries have existed at the edge of the instructional life of the school. Libraries provide information and materials to back up instruction, but those in charge have not taken on an active role in the design and implementation of the curriculum. Research has found that library media specialists rate very well when teachers compared them with other teachers in levels of cooperation in instruction. The Whitman LMC needs to go from reacting to requests as a warehouse of knowledge to initiating action and increasing student awareness of resources and technology. The Library Media Specialist is a significant part of this innovative pilot program. Time for collaboration and implementation needs to be provided. Additional personnel in the Library Media Center will allow the LMS to be part of the program, allow for flexible scheduling, and create a team in the LMC which will be able to meet the needs of all Whitman staff and students.

Appendix H

Examples of two of the thirteen integrated units prepared for fourth grade.

Library Media Integration

Grade: Fourth

Curricular Area: Reading

Unit/Activities: Dreamers-Biographies

1. Make a card file of famous people by categories (404C in anthology)
   Dreamers include authors, artists, inventors, sports figures, presidents, astronauts, etc. In groups choose three from different categories, find pictures, write up a brief history of each.

2. Interview a teacher in the school or grandparent or other important person. Write a letter to the person about the assignment, write up interview questions, interview subject, correlate and publish. Students also include drawings of subject and the published biographies can be found in the teachers prep room.

3. Biography cube, different fact about subject on each side

4. Biography book reports, explorers and inventors

5. Be pen pals with another school via computer

6. Can integrate with important people in occupations in region and Illinois units

7. Students can give oral reports from card file, speaking and dressing like the subject

Information Skills/LMC Involvement:

1. Define and use parts of a book
   index (1 C)
2. Define, locate and use non-fiction books (3 A-D)
3. Define, locate and use references
   Identify call number and arrangement (4 B)
   Specifically 920 and 921
4. Use encyclopedias, index and cross references (4 C)
5. Use atlases and almanacs (4 D,E)
6. Use biographical dictionaries (4 G)
7. Use magazine indexes (4 H)
8. Use data bases, Compuserve and Prodigy (4 I)

Resources Needed:

BOOKS
Biographies and biography collections in 921 and 920
Special biographical dictionaries
Author encyclopedias

TELECOMMUNICATIONS
Prodigy and Compuserve, people in the news

MAGAZINES
Biography Today
Cobblestone
Children's Magazine Guide

MEDIA
Filmstrip kits, Martin Luther King, Jr., presidents, authors, exploreres, sports figures
Special People, Reading Comprehension kit

VIDEOS

Library Media Integration

Grade: Fourth

Curricular Area: Social Studies

Unit/Activities: Geography/Map skills

1. G.R.O.W. Geographic Review of Our World by McDougal Littell, now called Daily Geography
2. Where is the U.S.A. (World, Europe) is Carmen Sandiego?
3. Map and Globe making-paper mache and salt maps
4. Can tie in with explorers, regions, fairy tales, historical fiction, or current events.

Unit skills:

1. Identifying continents
2. Symbols/legends/keys
3. directions, compass
4. boundaries

Information Skills/LMC Involvement:

1. Define and use parts of a book (1 A-D)
2. Define, locate and use fiction books (3 A-C)
3. Define, locate and use references (4 A-C)
   - D. Use atlases, indexes, charts, graphs, coordinates.
   - E. Use almanacs, index in front, need to know key words
   - F. Use geographical dictionaries
   - H. Use magazine indexes, Children's Magazine Guide and National Geographic.
   - I. Use telecommunications, Prodigy and Compuserve
   - J. Use Mac USA
   - K. Use MacGlobe

4. Use CD-ROM and World Atlas
5. Use interactive video
6. Use the card catalog
7. Use the automated catalog
8. Use of programs on network and Apple II Lab packs

Resources Needed:

BOOKS

Geography books in the 900's and special atlases and geographical dictionaries in the Reference section.
Class set of atlases.
G.R.O.W. or Daily Geography
Encyclopedias
Almanacs

MEDIA

Globes and 3-D maps
Filmstrip kit, How to use Maps and Globes by Troll
Map file, National Geographic
Directions in Geography-A Guide for Teachers by National Geographic (3 ring binder)

MAC DISKS	APPLE II DISKS
MacUSA	Where in the World is Carmen Sandiego?
MacGlobe	(Europe, USA)

CD-ROM

World Atlas

LASER DISKS

Appendix I

LIBRARY MEDIA CENTER SCHEDULE 1993-1994 WHITMAN SCHOOL

Monday, Tuesday, and Friday morning are on Flexible Schedule
Wednesday, Thursday, and Friday afternoon are Fixed Schedule

	A	B	C	D	E	F
1		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
2	9:00			9:15 KVETKO	3/WILSON	
3	9:30			3RD GRADE	9:45/WHITMAN	
4	10:00			K/SILVER	3RD GRADE	
5	10:30			6/MATZEK	ALIMI/4	
6	11:00			REILLY/4	BILINGUAL	
7	11:30			BILINGUAL	6/ROBISON	
8	LUNCH					
9	1:00		5/Belieff	PLANNING	PLANNING	PLANNING
10	1:30			5 BIL/MAZE	K/SILVER	K/RIENDEAU
11	2:00			2/JANETZKE	5 BIL/OTTO	1/MILLSTONE
12	2:30			2/KLEIN	1/ ZIMA	1/ O'REILLY
13	3:00			6/ SILVER	A/V REPAIR	2/NELSON

Appendix J

L.M.C. LINES

There are many changes taking place this school year in the library media center and our key word is flexible. We are very excited about all these changes and hope they help to increase the use of the L.M.C. by both individual students and small groups and encourage teachers to integrate classroom curricula with information skills.

1. This year our schedule is half flexible and half fixed

   A. Monday, Tuesday and Friday morning are flexible. During this time the following teachers can schedule their classes in and meet for planning:

4-Burke	5-Moran
4-DelPorte	5-Stearns
4-DeNoma	5/6-Lindberg
L.M.C.-Hunter*	6-Meyer

   * On these days I will also schedule in 1st and 2nd grade PEP and 3/4 E.O.P groups in reading and math.

   B. On Wednesday, Thursday and Friday afternoon the other 20 classes have their weekly half-hour times.

2. One benefit of this schedule is that all 4th, 5th, and 6th grade students can come with a pass for book checkout any time on Monday, Tuesday, and Friday morning. (No more than 3 at a time , please) Also on these days small groups in grades 1-6 can come for research. A note ahead of time would be nice, but not necessary.

3. This year students can check out books for 2 weeks at a time. If they haven't finished the book after a week they won't have the hassel of renewing it, but can keep it for a second week. Students in K, 1, and 2, still only check out one book and can only check out another when it is returned. Students in grades 3-6 can check out up to and no more than 3 books at a time. They can also check out an overnight reference book at the same time.Students in grades 3-6 will be encouraged to return books

as soon as they are finished with them and not wait the two weeks. Bee will be printing up overdue notices by room every Friday morning and if the students don't respond then individual notices will be sent.

4. Classes for teachers on the automated catalog will be scheduled soon in our L.M.C. The district is offering classes on the MAC, Appleworks, and Children's Writing and Publishing with the computer writing teachers. New information will be forthcoming from Don.

5. As soon as the other 5 MAC LC II's arrive I will be sending each grade level 1 MAC LC, 1 Apple II and 1 printer. How you arrange to share this equipment will be decided at your grade level.

6. Attached you will find a form with boxes of the school months Sept. through May. I would appreciate it if you could take the time and write in the units you think you would be teaching during those months. I would like to coordinate my units and skills with what you are doing in the classroom. I can also watch for new books and media to go along with your units, before and not after they have been taught. All subjects would be useful, not just reading.

7. Attachment #2 is a form to fill out if you find our collection is not meeting your needs. Please include media along with books. Make extra copies if you need them, and turn them in as often as you wish. The Board designated extra dollars for books this year and I would like to order what you need. Orders will be sent in every month.

If you have any questions about the new procedures please stop by and see me. Also the first five teachers who read this to the end can stop by and pick out a paperback book Again, thank you.

Information Skills, 1993-94		
	Grade/Teacher:	
September	**October**	**November**
December	**January**	**February**
March	**April**	**May**

Appendix L

Suggestions for Purchase of Library Media Center Resources

Teacher: _____

I could use more books in the Library Media Center about the following subjects:

_____

_____

_____

_____

_____

_____

_____

_____

I would recommend that the following titles be purchased for the Library Media Center:

_____

_____

_____

_____

_____

_____

_____

Appendix M

Teacher Interview II

1. What specific information skills have you observed your students using in their classroom assignments this year?

2. What skills do you observe them lacking that you feel are necessary at their level?

3. Are you requiring more in depth research for classroom assignments this year?

4. Are you sending more small groups to the Library Media Center this year? Why?

5. Are your students visiting Indian Trails Public Library for research on classroom assignments more than in previous years?

6. Do you see your students exhibiting more knowledge of information skills after the implementation of the program of the flexible scheduling with integrated skills? Are they connecting information skills with classroom assignments?

Any comments?

Appendix N

Student Interview II

1. Do you like doing research in the Library Media Center?

2. Do you do research in your classroom? Are their sufficient resources?

3. Are you allowed a pass to come to the LMC for research when you request one?

4. Do you often come to the LMC for small group research?
   Is this more than last year?

5. Do you go to Indian Trails to do research?

6. Do you feel you are an independent researcher in the Library Media Center?
   Can you easily use the automated catalog?
   Have you used the reference section more this year than last?

7. Do you like the way the library /information skills program is organized this year?

8. Do you have any concerns about book checkout?

Appendix O

Assessment for the Automated Catalog and location of Non-fiction books

Student_____ Peer evaluator_____

Student:

1. Choose your topic and write it here _____
2. Do a search on the automated catalog.
3. Explain to your peer evaluator what you are doing and why
4. Explain each of the columns on the screen.
5. Print out the screen.
6. Go to the shelves and find a book on your topic listed on the printout.

Peer evaluator:

Was the proper type of search initiated?_____ (subject, title, or author)

Was the procedure correctly described ?_____

If no. what was the specific problem?_____
_____.

Could your classmate explain the columns on the screen?_____

If no. what column was there a problem with?_____.

Attach the printout to this paper.

Rating:

excellent____ good____needs tutoring____needs a formal lesson____

Put this assessment in the book found on the shelf and place in the basket.

Thank you for your help.

Information Skills				
Skill				
	Grade 3	Grade 4	Grade 5	Grade 6
1. Define and use parts of a books:				
A. title page including author, title,				
illustrator, city, publisher, copyright date				
B. table of contents				
C index				
D. glossary, appendix, bibliography				
2. Define, locate and use FICTION books				
A. Differentiate between fiction & nonfiction				
B. Identify call number				
C. Identify arrangement and location				
3. Define, locate and use NONFICTION books				
A. Differentiate between fiction & nonfiction				
B. Identify call number				
C. Develop an awareness of the organization				
D. Identify arrangement and location				
E. Identify, locate and use biographies				

Skill	Grade 3	Grade 4	Grade 5	Grade 6
4. Define, locate and use REFERENCES				
A. Evaluate and compare sources				
B. Identify call number & arrangement				
C. Use encyclopedias				
1. key words, guide letters				
2. index, cross references				
D. Use atlases				
E. Use almanacs				
F. Use geographical dictionaries				
G. Use biographical dictionaries				
H. Use magazine indexes				
I. Use remote date bases:				
(telecommunications - Compuserve, NASA)				
J. Use MacUSA				
K. Use MacGlobe				
5. Use the CARD CATALOG				
6. Use the AUTOMATED CATALOG				
7. Compile a bibliography in correct form				